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THE SURFACE APPLICATION OF STABLE AND  
FARM YARD MANURES, AS A PRACTICAL  
QUESTION.

The subject of manures, whether as to their nature, or their method of application, is of sufficient importance in agriculture, to justify a frequent recurrence to it. We are not the advocates of any theory or any practice, except so far as it may seem to be true; and to determine the truth, we desire and invite the freest discussion.

We introduced into the *Farmer*, more than a year ago, the topic of *Surface Manuring*, or the application of barn-yard and stable manures on the surface of the ground, under a very strong conviction of its superiority to the practice of ploughing them under, and because we know the latter practice to be still very prevalent, under the influence of the theory, that exposure on the surface would cause the loss of the volatile ammonia, which is esteemed the most valuable element of the manure.

We stated in the beginning, that there was nothing new in the idea of surface dressing, but that the practice of covering and manuring the surface, as a method of manuring, was almost universally ignored by writers on agriculture of the present day; that they maintained the long recognized and time-honored theory which such men as Sir Humphrey Davy and Sir John Sinclair had taught. It was against this theory that we wished to embody and give force to the experience of intelligent farmers. We meant to take the side of the practical man, against the writers; to uphold well ascertained facts, not against scientific principles, but against what, we had no doubt, was a false application of a principle.

We have maintained the practice of surface manuring on its merits, practically. It does not so much concern us, interesting and useful as the determination of the theory may be, to know why the thing is so, as whether it is so; we do not require

to know whether the ammonia will evaporate, or the nitrogen wash away; but will the application on the surface be more immediately and permanently effective? We want results; we want improvement, and crops, and profits. If we lose the ammonia and get better crops, we can afford to lose it; it is a profitable loss.

We propose now to sum up the testimony which has been adduced during this discussion, or to show, rather, how singularly unanimous and emphatic it has been. Not one practical farmer has borne testimony in behalf of ploughing under manures, as the result of his own experience. On the other hand we have, in communications to this journal—first, "A Virginia Farmer," then Col. Rouzé, Mr. Gilmer, and "A Chester County Farmer." Then Mr. Calvert bears earnest witness in behalf of surface manuring, and Mr. Eldridge, of Cecil county, gives his experience, showing an effect in direct proportion to the length of time that the manure was exposed on the surface. Besides these that we quote from memory, it is said in the *Southern Planter*, to be the well approved practice of many of the very best farmers of Virginia; and Mr. John Johnston, of Geneva, New York, quoted constantly as one of the best farmers in that State, is most emphatic in his commendation of it. In our personal intercourse with practical men, we have had similar testimony. Mr. John Q. Hewlett, our model as a thorough farmer, not only approves and practices surface manuring, but says: "I talk with every farmer I meet, and I have not seen the first man, since the discussion commenced, who from his own experience favors ploughing under farm yard manure, but many good farmers who advocate it." Mr. Earle, late President of the Maryland Agricultural Society known as one of the best farmers in the State, says: "It is unquestionably the true system."—Mr. John T. Hodges, of Anne Arundel, and his

neighbors, we believe without exception, in one of the most highly cultivated and best farmed sections of country we are acquainted with, have practised the system to a greater or less extent for years.

But the effect of the discussion is not only to bring to bear such witnesses to the practice of surface manuring—it has led others, who have heretofore received the theory of the waste of ammonia without question, and conformed their practice to it, to try the matter for themselves, and to settle the controversy by their own experience. Mr. Benjamin Tongue, of West River, says: "I did not think there was common sense enough in the recommendation to spread manure on the surface, and I tried it at first very cautiously. I am now satisfied, and use all my manures in that way." Dr. Clement F. Jones, of St. Mary's Co., informs us that he made experiments on his wheat land last fall, spreading the manure upon a portion of the sod seven weeks before ploughing; and this spring upon his corn ground, ploughing a portion well under, and applying some alongside on the surface, after the land was ploughed; and in both cases with results in direct conflict with his previous convictions, and most convincing in favor of the surface application. And so we have no doubt there are thousands who will be convinced against their long standing prejudices, and be induced to adopt a more economical practice, and one greatly more convenient in its application. So much for the practical question. It has been raised and maintained upon its own merits, in opposition to a prevailing theory. We propose now to look at the theory.

#### THE THEORY OF SURFACE MANURING.

It is somewhat remarkable, and not less gratifying, to those who take an interest in the progress of science, that while intelligent practical men have spoken thus emphatically, there has been a concurrent development of science perfectly consistent with these facts. The great bugbear which has made it essential to cover at once putrescent manures, was the volatile ammonia, which it was argued would be lost by exposure. Professor Voelcker discovers and avows, that there is in such manures no ammonia that it is worth while to save. In the summer of 1856, at the Agricultural College at Cirencester, he gave the subject of farm-yard manures a most laborious and careful investigation, extending through many months. In his elaborate essay, published in the 18th volume of the Journal of the Royal Agricultural Society, he says: "There are many people who run wild with the idea that everything that smells strong must contain ammonia; but that is far too sweeping a conclusion. In the case of horse-dung, for instance, we are too apt to believe this loss to be far greater than it really is. Yet although in fermenting horse dung the

proportion of nitrogen is smaller than in fresh, which agrees well with previous analysis of fresh or rotten common yard manure, yet in perfectly fresh horse dung the amount of free ammonia is scarcely weighable, it being only about three parts in every 100,000 parts of dung, or 3 lbs. for every forty tons; the same description of manure in active state of fermentation, yields somewhat more, but still a very inconsiderable quantity of free ammonia."

"The strong smell which is observed on turning a dung-heap, no doubt has led many greatly to over-estimate the amount of ammonia from farm-yard manure in an active state of fermentation.—But I would observe, that nothing is more fallacious than the estimation of the ammonia by the pungency of the smell which is given off from fermenting animal matters. Such matters often give off very powerful smell, which is due to peculiar volatile organic combinations—to some sulphuretted and phosphoretted hydrogen, and a great variety of gaseous matters, among which there is ammonia gas in very minute quantities. The smell of this highly complicated and but scantily examined mixture of gaseous matters, as a whole, is ascribed by the popular mind to ammonia. From these products of putrefaction, however, ammonia can be completely separated, without in the least destroying the peculiar offensive smell, which emanates from organic matters in a state of decomposition."—Now if this announcement of Professor Voelcker be true, we find that stable manure, even fermented or in a state of fermentation, is not liable to the loss of ammonia, on exposure to the atmosphere—the nitrogenous matter remains unchanged in the manure. It is not volatile, but when spread upon the surface remains there until with the first rain, it is absorbed into the soil. The facts of science are reconciled thus, with the observation of practical men.

Now as to the degree of respect to which Dr. Voelcker's opinions are entitled. His essay was the result of the most careful and deliberate investigation. It was published in the Journal of the Royal Agricultural Society, of England, and commented on in the various agricultural journals.—From this circumstance, and from the interest attaching to the subject, it must have attracted the notice of every chemist of Europe; and now, after more than twelve months, we have yet to see the first opinion of any English or Continental Chemist, dissenting from or controverting his conclusions. On the contrary, we find the essay, among many other comments, spoken of in the *Farmer's Magazine*, as "a record of facts, accompanied by conclusive evidence, as distinguished from communications of a theoretical character, and containing the wise opinions of an individual." And again: "These results may be taken as established, the analyses and tables being appended, as the evidences on which the results are founded."

And, in the November number of the *Farmer's Magazine*, we find so eminent an agricultural writer as M. Cuthbert W. Johnson, quoting Dr. Voelcker's opinions, and, to one who doubts his conclusions, from their inconsistency with previous opinions, saying: "Let him not forget that it is only by repeated and patient inquiries after truth, that her confines are even approached.—Two very material questions have engaged this accurate chemist's attention: the loss of ammonia during 1st, the preparation of yard manure; and 2d, after it had been made into compost heaps.—We shall see that he was not unmindful of either its gaseous emanations, or of its loss in drainage water. It is satisfactory to find from these researches, that the loss of ammonia from fermenting dung, is commonly not so considerable as is sometimes believed. We are in these inquiries perhaps too ready to be deceived by careless observation."

We agree then, as at present advised, the theory of Dr. Voelcker. Ammonia exists in extremely limited quantity in farm-yard and stable manures, as we are in the habit of using them. It is not, therefore, liable to waste by exposure on the surface.

The application as a top-dressing, gives every growing plant the benefit of its immediate action; the roots absorbing it at once, as the showers and sunshine act upon it. The ground gets the benefits of the covering, whatever they may be.—We are willing on this point to take Mr. Clemson's explanation as very probable—that the warmth and moisture of the covering induce a growth of infusorial life, which not only changes, by their workings, the character and consistency of the soil, but perishing then in myriads, furnish the food of plants.

With all deference to a gentleman whose name has been associated with the practice of surface covering, we mean Dr. Baldwin, while we agree with him entirely as to the value of this method of manuring, we do not appreciate his theory.—He rejects every scientific explanation of the fact, but adopts one of his own, which, if true, is sufficiently scientific. He thinks the covering causes the surface of the earth to "putrefy," and "the residue of putrefaction" is the food of plants. The last named proposition must be admitted to be not far from the truth. What is called "putrefaction" of the soil, is in other words the decomposition of its constituent parts—its mineral and vegetable, its inorganic and organic elements; and the phrase, "residue of putrefaction," is only another mode of expressing the condition to which every one admits these elements must be reduced, before the roots of plants can appropriate them. They must be in a state of solution, and to this end they must be set free from their several combinations by decomposition. Now if covering the

surface produces this effect (which is not proved), then it is for this reason a very useful agency upon some soils; and if all soils contain all the elements of plant food (which is not admitted), then this agency may be universally applicable.

## WORK FOR THE MONTH.

### AUGUST.

The season for planting and cultivating, the labor of the grain and the hay harvest being pretty well concluded, other cares will command, now, the farmer's attention. The threshing of grain, the preparation of fallows, &c. will be carried on, on strictly grain farms. On the Tobacco plantation, however, this valuable crop will demand during the month, all the labor at command. We will make first, such suggestions as may be serviceable here.

#### TOBACCO.

*Cultivation.*—Continue the careful working of the crop, as heretofore directed, until the leaves stretch across the rows, and finish the working with the hoe.

*Worms.*—The July "glut" of worms has been this year, in some locations, unusually numerous, and done much damage to the early planted tobacco. It should be a warning to planters to be on the look out for them in August and September, and to use every means to prevent or subdue them. A very simple and very effective method of destroying the "Horn Blower" is that practised by the Florida Planters, and reported two years ago in the *Farmer*. Mr. William Shepard of Bristol, A. A. Co., on whose inquiry, two years ago, the communication was made, reports to us now that it was fairly tried by himself and his neighbours, and found to answer admirably. One ounce of cobalt in a pint of water, sweetened with a gill of honey, is the preparation. Put it in a quart bottle with a cork and quill, and through this, shake a drop or two into some of the blossoms of the Jamestown (or Jimsun) weed. In Florida, we learn, they are careful to raise plants of the weed for the purpose, and stick up lathes through the tobacco field, inserting a blossom in the top of the lathes for the purpose of poisoning. The "Blowers" are sure to visit every blossom, and like rats, "that ravin down their proper bane," are sure to die. If you have no weeds set the poison about in plates or old cups on gate posts, or other suitable places, but with very great care, lest the negro children should dip into it. When the second "glut" of worms begin to make their appearance, be sure to take them early. It is well to destroy them before they begin to crawl away from where they were hatched. The damage they would do is prevented, and they are more certainly found. Use all possible

watchfulness to prevent their increase in size and numbers. Should they be very numerous however, and get much size, it may be advisable to go rapidly through the crop, destroying all that appear, the large ones especially, without occupying the time in hunting for such as are out of sight. But remember that all the force of the farm must be devoted to their entire extermination, and continue to go over and over until they are subdued.

**Topping and Suckering.**—The topping of the Tobacco is done as it begins to "button," or show signs of the blossom. This should not be delayed too long, as early topping gives the upper leaves time to grow out and mature, before cutting. Keep the suckers down, which begin to grow immediately after topping. By all means, take the suckers well out before cutting; if left, they continue to grow after the Tobacco is housed, interfere with curing, and stain the leaves which they come in contact with.

#### RUTA BAGA AND WHITE TURNIP.

It is not too late still, for a good crop of *Ruta Baga*, if your ground is put in good condition and well manured. White Turnips should be sown by the 10th of the month, but as late as the 20th will make them good for table use.

#### CATTLE PENS.

Now that the great hurry of the farm work is over, make pens to put your cattle in at night, from this time till late in the Fall. Give them, if you can, a littering of old straw or unrotted stalks, or any such thing at command, and remove them once a fortnight. Let these pens be on your next year's cultivation, and you may manure much of it before winter. Have a set day for removing them, and be sure to do it regularly.

#### FALLOWING.

The important work of preparing fallow for wheat, should be begun early, if the ground be in condition to plough; first, lest later in the season it become hard from want of rain, and it may not be done in time, and in the second place, because it is well settled, that early fallowing is better for the crop. Begin early, and you have, too, time enough to do your work well, without hurrying or forcing.

#### BUSHES AND BRIARS.

It is hardly necessary to remind you that briars and bushes be thoroughly extirpated, not only from your ploughed ground, but from every fence corner. We know a farmer whose fence corners are as clear of briars as his fields, because he omits no opportunity of destroying them. On whatever crop the hoe is used, the work does not stop at the end of the row, but goes to the fence, taking out every useless plant.

#### THRESHING GRAIN.

The work of threshing this year will be unusually disagreeable work—a great deal of straw, and very little grain. It is well to be through with it early. Take a word of caution in guarding against accidents, by which the limbs or lives of valuable servants are frequently lost. 1st. Let none but a careful and perfectly sober hands be trusted about the working part of a machine. 2d. When necessary to handle the working parts of the machine, unhitch the horses; they may start suddenly, and cause an accident. 3d. Let none but a careful and experienced hand be allowed to put on or take off the belt, and caution him against putting his fingers between the belt and pulley. 4th. Have a machine so constructed, that the feeder's hands will be in no danger of reaching the teeth of the thresher. 5th. Have a perfect platform, solidly secured, for the driver to stand upon.

#### LATE POTATOES.

Keep late potatoes well worked, till they are in full bloom.

#### RYE.

The preparation for this crop should be made this month, so that you may sow the first week of September. It is well adapted to such lands as are too light to grow wheat profitably. It is not to be expected, however, that a profitable crop of this or anything else is to be made upon poor land, without manuring. If it is to be sown among the standing corn, put it in with cultivators; and if the ground has not been pretty well manured for the corn, give it a dressing equal to a hundred pounds of Peruvian Guano.

#### SOWING TIMOTHY.

If you mean to sow a timothy meadow, prepare your ground thoroughly this month. If you think proper to take a crop of turnips from the same land this fall, be in readiness to sow by the 15th to 20th of the month. Give an extra dressing of manure, and you may sow your timothy and turnip seed together, and get a crop of the latter which will pay the expense of cultivation and manuring. We do not, however, like the system of standing meadows, except where the character of the ground makes it unfit for ordinary cropping. We would have timothy in a rotation with other crops, allowing it to remain two or three years after the grain crop with which it may be sown. The crop decreases rapidly after two or three years cutting, and the land should then have the advantage of the turf ploughed under, the influence and melioration of the atmosphere, and the change to another crop. It is quite time enough to sow the seed when you sow your wheat. Whenever, or however sown, the ground must be in very good condition or very well manured.



## DRAINING.

This is a good season for draining wet meadows, and for clearing them of bushes and briars. Your attention will be drawn to the necessity of this work, when you are saving your hay from such grounds, and there will be perhaps some leisure immediately after this work is over when it may best be done. The "Red Top" grass is most suitable to these meadows, and will usually take possession of them naturally, where the ground is suitable. It is well, however, where the growth is thin, to throw on extra seed, and a little manure, harrowing them in.

## WORK IN THE GARDEN.

## AUGUST.

*Fall Turnips, Spinach, &c.*—Dig, manure, and otherwise prepare the ground for fall crops of these, and sow by the 15th.

*Weeds, &c.*—Keep the growing crops all well hoed, and be sure that no weeds are allowed to go to seed.

*Celery.*—If your celery for winter use is not yet planted, it is still time enough. Let it be done, however, quickly, with good preparation of ground, as directed last month. The earlier planted, as it gets large enough, may be earthed up gradually; gathering the leaves up, and drawing up the earth, being careful not to cover the bud.

*Cardoons.*—Earth up Cardoons as they advance in growth, keeping the leaves drawn close together during the process, and afterwards from time to time, as they require it.

*Herbs.*—Such herbs as were not gathered last month, should be attended to.

*Hops.*—Hops will be ripe, and must be gathered in a dry season.

*Cabbages.*—Plant out immediately—if not yet done—your late cabbages, on well manured ground, and keep them well attended.

*Beans.*—Beans for pickles may be planted.

*Strawberry Beds.*—New beds of Strawberries, if wanted, should be prepared this month, to be planted in September.

*Water.*—Keep all growing plants well watered.

**WHEN CORN GROWS.**—Dr. R. R. Harrison, of Prince George county, Va., has taken pains to make some careful examinations to ascertain whether corn grows, as is generally supposed, more at night than by day. August 1st, corn grew, in twenty-four hours, five inches; at night, one and a-half inches. August 2d, it grew four and seven-eighths inches; at night, one and seven-eighths inches, and in the day, three inches.

**IMPORTANCE OF EDUCATION.**—All who have meditated on the art of governing mankind, have been convinced that the fate of empires depends on the education of youth.

## FLORICULTURE—August, 1858.

*Prepared for the American Farmer, by W. D. Brockenridge, Florist and Pomologist, Georgetown, Balt. Co., Md.*

*Dahlias.*—These, after the late refreshing rains, will be growing freely, and soon expand their blooms; prune out all straggling and cross branches, and continue to tie up to the stakes, as they advance in height. Should the red spider attack the leaves, syringe them freely, at least twice or thrice every week, with a weak solution of whale-oil-soap and water, and you will soon rid yourself of the pests.

*Carnations.*—If not already layered, should be attended to at once. Collect all seeds, as they ripen.

*Chrysanthemums.*—In the open ground, may yet be layered. Continue to shift into larger pots those plants struck from cuttings, or from divisions of the roots, as the pots soon become filled with rootlets; water twice every week, with liquid manure.

*Camellias.*—Such as require it, may be shifted now; continue to in-arch and put in cuttings, using the syringe freely, to keep them clean.

*Lemon and Orange Trees.*—In a growing state, may still be successfully budded.

*Azaleas.*—Such cuttings as are rooted should be placed in two-inch pots, for this purpose—use a compost of well decomposed vegetable earth, sharp white sand, friable loam, in about equal parts; place the young plants in a moist shady situation, until they become established.

*Tree Paeonias.*—Continue to graft these until near the end of the month, using for this purpose the tubers of the common herbaceous kinds.

*Calla Ethiopica.*—When they are wanted to bloom early, a few roots may be potted, and watered towards the end of the month.

*Hydrangeas.*—Cuttings of these put in last month, will now be ready to place in single pots; give them a good, rich, light compost.

*Roses.*—Continue to layer the young shoots of such kinds as may be wanted, (the Hybrid Perpetual kinds do not, as a general thing, root freely by layering); budding may be done with success during the whole of the month, and towards the end thereof, cuttings may be put in, and if properly attended to, will root freely.

*Oxalis Bowiei*, and its kindred species, may be divided and potted, so as to flower late in the fall.

*Greenhouse Plants in general.*—should, towards the end of the month, be repotted, and placed in good order. It is better to defer shifting of the different kinds of *Epacris* and *Ericas*, until the weather becomes cooler.

*Pansy, Schizanthus, Mignonette and Sweet Alyssum seeds* may now be sown, as plants raised now, and properly cared for, will bloom in the winter months.

*Cyclamens.*—should be repotted this month.

*Chinese Primroses.*—Observe to shift the young plants into larger pots, as they advance; a rich open earth suits them best.

*Victoria* and other stocks sown last month, ought now to be placed in single pots; give them a situation that is light and airy.

*Flower Garden.*—The dry weather during the past month being favorable for the destruction of weeds, every compartment, since the late rains, ought to be in fine order, and the plants in a thrifty condition.

Hoe your borders and beds deep and frequently; by so doing, dry weather will not materially affect your plants, and weeds—the blur of most of our flower gardens—will have to be sought for, rather than form the most prominent object of the flower parterre.

#### FARMERS' CERTIFICATES IN FAVOUR OF SUPERPHOSPHATES.

WARSAW, Richmond Co., Va., July 13, '58.

To the Editor of the American Farmer:—

Dear Sir—Enclosed I send you a check for five dollars, in payment of my subscription to the Farmer—and offer my best wishes for the future success of your valuable journal.

Our farmers are now busily engaged in threshing their wheat. So far the result shows an abundance of straw and very little grain, and that very inferior in quality. The crop in this county, as far as I can gather from observation, and from information derived from intelligent, practical and judicious farmers, from different parts of the county, cannot possibly exceed a half crop. Many think it will be less. In the adjoining county of Westmoreland, the prospects are still more gloomy. The crops of wheat, not destroyed in that county by the hail storm, are nearly ruined by the combined ravages of the fly, joint worm, scab and rust.

Before laying aside my pen, permit me to add a word or two on the subject of the many nostrums, politely called, Fertilizers, with which the agricultural community is at present cursed. I have known many of them tried, and have yet to hear of the first one that has been of any benefit to the crop, to which it was applied. And yet there seems to be no lack of those who give certificates lauding them to the skies. This too, in some instances, in the face of their utter failure on the crops of the authors of these laudatory certificates. Why this is so, I cannot imagine, unless those gentlemen, like the fox that lost his tail in the trap, not wishing to be singular, desire their neighbors to be caught as they have been. A neighbor and county man of mine, has given a certificate to Messrs. Whitelock & Co., in which he states that he used their "Superphosphate of Lime, side by side with No. 1 Peruvian Guano, and that the trial is so greatly in favor of the Superphosphate that he will never use any thing else." Now, I am ready to prove, by a score of respectable witnesses, that the wheat on the land which the Superphosphate of Lime was applied, was of very inferior growth, whilst that with which the Guano was used, was of very luxuriant growth. Again, another neighbor certifies that the wheat on the land where the Superphosphate of Lime was used is far better looking than that on the same quality of land to which No. 1 Peruvian Guano was applied. When however, the scythe and cradle came to be used, there was scarcely any thing found to be cut on the land, that had been dosed with the Superphosphate, whilst the guanoed land presented an abundant yield of straw. This course on the part of gentlemen is highly injurious to the farmers, and must ultimately prove injurious to the vendors of this Superphosphate. These vendors are doing a very large business in the sale of Guano. They now have a most enviable reputation and popularity—which have been steadily and rapidly in-

creasing from the commencement of the Guano trade, to the present time,—but if their old customers are induced by these certificates to abandon the use of Guano and waste all their money in the purchase of their bantling, Superphosphate, they will turn their back upon them and patronise in future, some other house. This too, when they are nearly without blame, having been themselves equally imposed upon with their patrons, by these, in some instances, thoughtless certificates, but I am sorry to believe, more frequently designed misrepresentations.

My own experience is wholly against the use of those nostrums. In the fall of 1856, I used one bag of Rhodes' Bi-phosphate of Lime, on a piece of land which had been sowed in wheat that day and ploughed in with 212 lbs. of No. 1 Peruvian Guano, harrowing in the bi-phosphate immediately after putting in the wheat and guano. The bag of the bi-phosphate was applied to less than half an acre of land. The growth and yield of wheat on this half acre was not a whit better than that on the adjoining land, which had only received a like application of guano,—and I have not been able to see that the growth of grass now on the land is at all better than that on the land adjoining.—Last fall I used 300 lbs. of W. Whitelock & Co.'s Superphosphate of Lime on rather less than an acre of land, harrowing that and the wheat in together. To the adjoining land I applied 216 lbs. of No. 1 Peruvian Guano—ploughing both wheat and guano in together. The wheat on the guanoed land was luxuriant in growth, and will yield a fair crop for the year—whilst that on the land to which the Superphosphate was applied was of sickly growth and scarcely worth reaping—indeed the horse reaper would not cut it at all. I will add, that a number of my friends and acquaintances, both in this county and the adjoining county of Westmoreland, used their Superphosphate last fall with as little success as myself. Neither they nor I will repeat the experiment. And I will venture the prediction, although "neither a prophet nor the son of a prophet," that neither of my neighbors who have given certificates will buy a pound of the Superphosphate next fall.

Yours, truly,

THOMAS JONES.

#### ERADICATION OF BRIARS.

To the Editor of the American Farmer:—

Dear Sir:—Having every thing connected with profitable agriculture at stake, and being desirous to learn of you, or any of your correspondents, the best method of freeing land of briars, I have determined to give you my theory of the matter, and to request from you or your correspondents, your systems, in case mine does not accord with your judgments.

My theory is, that lands infested with briars, or other filth, should be ploughed just deep enough to expose the roots of the pests, and then by means of a three horse harrow, that the roots and stems can be dragged out. This ploughing and harrowing to be done of course, as near mid-summer as possible.

I differ essentially from Major Jones' letter, with regard to the proper time of cutting wheat. His experience is not satisfactory to the practical farmer, for a very obvious reason—because he cut all of his wheat when in the same condition. Probably if he had allowed some of it to become

dead ripe he would have found the yield instead of 17 bushels per acre, to have been much less.

The wheat crop of this county is unusually light, and it is, in my opinion, attributable to three causes;—first, to the fly—secondly, to the scab—and thirdly, to the very hot suns. All of our wheat was ripe and upon us at once; whereas with favorable weather much of the wheat would have been a week or ten days earlier than the rest.

Corn with us is very backward, owing to the lateness of planting, and the continued dry weather of the past month.

I hope that you will let me hear in your August number all that you can collect with regard to the eradication of briars.

Yours, &c.

A WELL WISHER AND SUBSCRIBER,  
Of Somerset County, Md.

#### GARLIC FOR PASTURAGE.

*Mr. Editor:*—In your last issue I observe a short letter from J. R., of Baltimore County, asking information in your next number, in what manner he may get rid of the garlic by which his fields are infested. I have no doubt of the correctness of the statement from a Montgomery farmer, in general; but admitting that it was invariably the case, there is occasionally a failure of the clover crop, and in that event, a poor chance for pasturage; whereas, if the garlic should be permitted to remain in the soil, there would be good grazing, even for milch cows. I am somewhat surprised that you should term garlic a weed. It is esteemed one of our most nutritious grasses, where it is best known; and the only drawback to our farmers, is its occasional luxuriance in our wheat crops; but wheat fans are now so constructed, as to separate them to the satisfaction of the most fastidious. Garlic, when most multiplied, makes the best grazing, and at the same time there is the least chance of its heading, when the fields are in cultivation.

Your garlic must be a degenerate stock, when compared with ours, if a little nipping in the early spring will subdue it for the season; our garlic requires continued and close grazing to effect the same object. We are indebted to the late Col. Edmund Brooke, for the introduction of garlic into this neighborhood. He saw the disadvantage we labored under, for want of early pasturage; and this farm is the place where he first disseminated his saddlebags of seed, brought from Gloucester.

Now, Mr. Editor, there is no accounting for tastes; you may prefer milk and butter fragrant with garlic, but it is abhorrent to me, both in taste and smell. It may be some consolation to your correspondent to know, that cows can graze on garlic, and yet their milk and butter be free from its taste: let his cows be driven up two and a-half or three hours before milking, and he will complain no more of his garlic.

Please excuse this garlicy letter.

Respectfully, yours, &c.

C. B. STUART.

*Worcester Co.*—Mr. John S. Spence sold his farm at private Sale, on Tuesday last, to Mr. Wm. S. Moore for \$6,700. It is five miles from Snow Hill, and contains 400 acres.—*Worcester Co., Shield.*

#### DESTRUCTION OF GARLIC.

*To the Editor of the American Farmer:*

*Mr. Editor:*—I notice in your last number some remarks upon the destruction of garlic.

I well remember when it was difficult to find butter in the Philadelphia market, made from upland pasture that was free from the taste of garlic; now, I understand it is rarely to be met with.

I will here remark, that thirty years ago, the lands around Philadelphia were as poor as any of the lands in Maryland. About that time the system of improvement commenced, and with it, the destruction of the garlic. Now this may have been in several ways; garlic, like the garden onion is a biennial, when permitted to go to seed, as the root or bulb then dies, hence, when land is improved so as to grow good grass, and that not pastured too young; the cattle in biting off the grass must also take with it the seed stalk of garlic.

The same also takes place by mowing. Once cropping or mowing however, will not destroy it; for, if you examine the root you will find a number of cloves around and attached to the principal bulb, each I believe capable, the next year, of putting up fresh stalks, but, by cutting them off for several years after the seed stalks and seed are formed I believe they may be destroyed; but, pasturing before the stalk is formed I do not think will ever destroy them. It must perform the function of reproduction before the bulb dies or it will remain a perennial.

G. M. ELDRIDGE.

Cecil County, Md., July 11th, 1858.

#### SNAKE PASCINATION.

*To the Editor of the American Farmer:*

*SIR:*—Though not strictly suitable for the pages of "The Farmer," I will relate a circumstance that may tend in a measure to settle the question of Fascination of Birds, &c. by Snakes. I myself have long doubted this power of fascination because I have observed that when birds have young, their disposition to defend their offspring, tempts them to venture much nearer to both Snakes and Cats than at other times, and the quiet manner in which both will lie waiting for their prey emboldens the poor bird to approach within their fatal grasp. But to the subject. A day or two since I went to my hay field to measure a piece of grass which I had sold; I threw my cane (of rather large size, black and glossy, with crooked handle, altogether much resembling a black Snake,) on the grass by the fence, about half an hour after, a man passing saw a Black Bird on the fence immediately over the cane, making all the cries and actions usually made by birds said to be charmed. The man was so much deceived that he, after looking some time at the Bird was about to throw a stick at the supposed snake, when he saw the crooked head, as he said, turned down, which led him to approach nearer, and to discover his and the bird's error. He brought me the cane, saying it had as completely charmed the bird as ever a Black Snake did. E.

Cecil County, Md., July 13th, 1858.

*SALES OF LAND IN MD.*—*Montgomery Co.*—We learn that the farm of Mrs. Geo. C. Washington, situated about three miles from this village, has been sold to Mr. B. T. Hodges, of Prince George's county, for the sum of \$18,000.—*Rockville Journal.*

**POTATO DISEASE.—IMPORTANT MICROSCOPIC DISCOVERY, SHOWING THE CAUSE.—PATENT GRANTED FOR THE REMEDY.**

[Communicated for the American Farmer.]

The microscopic examinations which I have made with the Potato plant, during several summers past, have revealed facts of vast importance to Agriculturists, both in America and Europe. In 1855 the United States Patent Office published various communications, letters, extracts, &c., upon the Potato disease. The first scientific examination in the United States was made in the State of New York in 1844. The publication of this investigation induced many persons in this country to form opinions, that, fungi caused the disease. The same opinion also prevailed in Europe. Atmospheric influence was another theory. Insects upon the vines and leaves another. My microscopic examination and experiments commenced at Waltham, Mass., in 1851. In June of that year, I found the leaves on my potatoe stalks turning yellow—some quite dead, while the tops and leaves, and also the leaves and stalks of other hills continued quite thrifty and green. This peculiar circumstance, thus early in the season, induced close observation and careful examination into the phenomenon. A query naturally arose—Can fungus or atmosphere act thus partially upon the Plant? Is there not some other predisposing cause prevailing? From this investigation I felt confident that insects or worms had attacked these Plants at the *Roots*.

Acting from this impression, I examined the roots, but with the natural vision no insects were found. The microscope however, revealed myriads of insects on the seed tubers, roots and stalks *under ground*. The attack upon the latter at the lower joint, was visible in spots or marks resembling *Iron rust*. Potatoes which I had in jars and flower-pots in my shed, covered from any exposure (experiment tubers) exhibited, under the microscope, similar insects; and the tubers taken from my cellar, at this time, had insects on those which were sprouted. Thus in *three separate and entirely dissimilar positions*, insects, similar in every respect, were found, evidently subsisting upon the sap of the sprouts and vines. This revealed to me unquestionable evidence, that, during the early growth of the plant, insects' ravages produced deterioration, by the drawing of the sap from the vital part:—thus causing the disease.—The insects being only microscopic, rendered it extremely difficult to discover the nidus or hibernating spot of the eggs.

Early in my researches, however, I became satisfied, from the position of the young insects, that the eggs would be found near or under the eyebrows of the potatoes. This proved to be correct. It was not till 1856 that I first found the eggs. They are found embedded in the very sprouts and in the skin near the eyes. But only with a powerful microscope and the light of the unclouded sun can they be found. During the period from 1851 to 1856 my experiments in cultivation and otherwise were continued. Since the latter date I have watched as before (sealed in glass jars and otherwise) the development of the tubers and the embryo progress of the eggs to the first animate motion of the tiny insects, and their attack upon the tender sprouts. The effects also of their ravages and the progress of the poison infused in-

to the vines causing the malady. This insect is the *Aphis*.

The particulars of my discoveries and my opinions were communicated to the Governor and Council of Massachusetts in August, 1851, answering a resolution of the Legislature, passed that year, soliciting information on this subject, and the fact is a matter of record in the State Department. For reasons of my own, my communication was to remain with the seal unbroken, (unless at my request,) until 1856.

I have thus placed before the reader the time, original circumstances of discovery, as also the final development showing the cause of the "Potato Disease." To corroborate these statements, you have placed before you herewith, as secondary evidence, the testimony of scientific men and Agriculturists of the highest authority in the nation.\*

The facts and authenticated proofs attached thereto and a multiplicity of other similar evidence have been placed before the United States Patent Office, there to remain. They are deemed adequate to settle the question positively, as to the cause of the disease. I need say only a word more. Let me briefly add, that by repeated experiments I have discovered a *practical remedy for the disease*. The tests of cultivation are here shown by the evidence of my immediate neighbors at Waltham, Mass., which proves the efficacy of my remedy. After a thorough and rigid investigation before the United States Patent Office I have secured Letters Patent from the United States Government for the right to apply the remedy. I am prepared to dispose of rights to use the remedy. Individuals wishing to possess the same for States or Counties, will apply by letter or otherwise, to the undersigned.

LYMAN REED,  
Baltimore, Md.

\*The communication of Mr. Reed was accompanied with copies of numerous certificates in testimony of his statements, the originals of which are filed in the Patent Office.—Ed.

**SALE OF TOBACCO AT RICHMOND AND BALTIMORE.**

To the Editor of the American Farmer:

Dear Sir:—Your journal has a wide circulation in Virginia, and a subscriber therefore takes the privilege of asking you to answer through the journal, for the information of your Virginia subscribers, a few interrogatories in reference to the manner in which Tobacco is sold in the city of Baltimore. Is it sold at a Tobacco Exchange?—If so sold, who are the sellers? Is the planter allowed to sell his tobacco at the Exchange? If so, upon what terms is he permitted to sell? How are the samples conveyed to the Exchange? Who attends the breaks of Tobacco when sampled?—Who takes care of the samples when conveyed to the Exchange? What are the commissions for selling tobacco in Baltimore? How is the Exchange supported, or rather what is the expense of the Exchange per hhd. and who pays this expense? Is any tobacco sold in your market by the planter? What are the expenses of selling Tobacco per hhd. in Baltimore? How far is the Exchange from the various ware-houses at which tobacco is inspected? You will no doubt see that the information above requested is desired on account of a recent innovation upon the long estab-



lished usage in the sale of Tobacco in Richmond, inaugurated by the assumed friends of the Planter in Virginia. Your compliance with the above request will greatly oblige, as well a subscriber for many years to your paper, as others.

#### A BUCKINGHAM PLANTER.

We will state in reply to the above enquiries, that in Baltimore, tobacco is sold exclusively by commission merchants. There is no Tobacco Exchange; the tobacco is consigned to the merchant, who looks after the inspection, takes charge of the samples, and sells at his counting-room.—The planter is frequently present to see his tobacco opened, but never makes sale of it. The charge is one dollar a hoghead for Maryland tobacco, and 2½ per cent. for all other. There is no other cost or charge to the planter, except in case of "stay," when there is a charge for shaking out and repacking of a dollar a hoghead; and when a hoghead falls to pieces, fifty cents for cooorage.

The Inspector in no case, as at Richmond, acts as agent for the planter. His business is to weigh and inspect. The inspection consists in making five breaks in the hoghead, and taking from each an average sample, which combined make the sample of the hoghead by which it is sold; and in determining the "condition" of the tobacco—if, in his judgment, it is not in "condition" for shipping, it is "stayed," and if necessary shaken out and repacked. The building of warehouses and repairing them, the Inspectors' salaries and all other charges, are provided for out of the "Tobacco Fund," raised by a charge of one dollar per hoghead, paid by the shipper on all tobacco shipped from Baltimore, and called "out-age." This fund is kept by the State Treasurer entirely apart from other revenues, and devoted exclusively to charges incident to the tobacco trade.

We would not advise our friends, without due consideration, to change their tobacco market.—While the Baltimore market is quite equal to that of Richmond, we presume, for shipping tobacco, there is by no means the same demand for manufacturing purposes, and they may lose by the change, in the absence of competition.

THE VIRGINIA NORTH WESTERN AGRICULTURAL SOCIETY—will hold their first Annual Fair, on Wheeling Island, Va., on the 14th, 15th, 16th and 17th of September, 1858.

Dr. HANSON W. CHAPLAIN, of Wheeling, President.

W. F. PETERSON, Jr., Corresponding Secretary.  
CHARLES MARSHALL, Recording Secretary.

The Exhibition of the Loudoun (Va.) Agricultural Society will be held on the fair grounds, near Leesburg, on Tuesday and Wednesday, the 19th and 20th of October next.

#### VARIOUS BREEDS OF SCOTCH CATTLE—JUDICIOUS CROSSING OF BREEDS.

The following article upon the several breeds of Scotch cattle, has some valuable suggestions on the results of judicious crossing, and useful observations as to the proper condition of breeding stock. The most useful purpose to be answered by the importation of high bred stock into this country, is the improvement of our present breeds. The selection of the best country cows, with their hardy, vigorous constitutions, inured to the vicissitudes of our climate, and breeding up upon these, will give, in a few generations, a stock of cattle more suitable for all purposes, than either one of the English or Scotch breeds, in their purity.—For this purpose, thorough-bred bulls should be always used, and it is most desirable that herds of pure blood should be maintained, to furnish them; but for general use, the cross upon the best native stock will be best adapted to our soil, climate and general farm management :

#### THE BREEDS AND BREEDING OF CATTLE.

From the (London) Farmers Magazine.

At the recent annual meeting of this society, held at Stirling, G. B. Home, Esq., of Argaty, in the chair, the following discussion on the various breeds of cattle took place. We wish that such discussions were everywhere the rule, instead of the absurd plastering speechifying which we too often meet with.

After the usual loyal toasts,

The chairman proceeded to introduce the discussion on the various breeds of cattle. He said—I am not sure whether the present is the proper time to introduce this or not, especially when there is a good deal of hot punch going. However, if you allow me, I will make the few remarks I have promised to do. My own opinion is that such a practice introduced among us after our dinners may be of great use to the society, and give us in going home something to think of, perhaps more pleasant and beneficial than toast drinking. I believe we must all acknowledge that agriculture has now attained the position of a high science. There are many ways in which in other professions there is an interchange of thought; there are mechanics' institutes, and other societies, where scientific men may meet and improve each other by an interchange of opinions; while many farmers, when they meet, are generally contented with bumper after bumper, and paying fulsome compliments to each other.—In all this I can see very little fun, one way or other; whereas, if there was a system of discussing agricultural subjects at such meetings, a great deal of improvement might be got both by those who joined in the discussion and those who listened (Hear, hear). On the present occasion I feel rather nervous in undertaking to introduce the subject of my remarks to this meeting; but I hope that the more flourishing our society becomes, and the greater number of members who join us, the less will such diffidence or difficulty be felt by future speakers, till we have an unserved scientific discussion on all subjects connected with agriculture. People who know noth-

ing about it may laugh as they like; but I have no hesitation in saying that the science of agriculture requires, for its proper application and development, the highest intellect and the best education that man can receive. To carry out agriculture to perfection requires a knowledge, aye, and an intimate knowledge too, of a number of deep sciences. If a farmer is to know anything about his cattle, he must have a good understanding of the anatomy and physiology of these animals; he must know something about how to cure their diseases. In the cultivation of grain, the farmer must possess a knowledge of chemistry—of the various kinds and properties of manure, and what manures should be used for a particular kind of grain. In fact, a farmer must be ever on the stretch—all his faculties on the alert; and if he carry out agriculture properly, it must be by a high cultivation of intellect, and by an immense amount of perpetual observation. He has not only to sow the seed and see it grow, but he must be able to see what has caused it to ripen perhaps sooner than before, or what has tended to prevent it coming to maturity as it ought, or what has caused it to survive blight. In fact, there are a thousand things which a farmer has to do, and which, to be done properly, require a mind of a high order. Indeed, the highest in the land are only too happy to be considered good and intelligent agriculturists; and, however things may have gone in time past, depend upon it, agriculture will take that high place among the sciences which it so thoroughly deserves, if it be carried on in a manner corresponding with the magnitude of the interests it involves. I have undertaken to bring before you this evening as a subject of discussion, the breeds and breeding of cattle. I do this because I have been an anxious observer upon these subjects for at least 30 years, and have, during that time, lost no opportunity of gaining information; and if there is one subject upon which I have a chance of talking agreeably, I think it is this. I shall endeavor to speak in such a manner, as to draw on the present company to say what their opinions are, and I hope every one will join in the discussion so far as any idea strikes him, and give us all the benefit of that idea. I begin with the aboriginal breeds.—In the parks of Cadzow, and at Chillingham, in Northumberland, there are cattle said to be the original breed of this country. I confess I have my doubts as to whether the white breed be the aboriginal one; but I am rather of opinion that, if we have an original breed at all, it is our unsurpassed Argyleshire. I do not specify Argyleshire distinctly as if I referred to a breed peculiar to that county, but I speak of our well known black cattle, which, although reared in many parts of our country, are yet shown to greatest advantage and perfection in the county I have named. It cannot fail to be observed that good specimens of our black cattle possess almost every point that the breeders of cattle of England and elsewhere are endeavoring to produce. We all know their fineness of hide, straightness of legs, length and breadth of hind quarters, fine development of breast and chest, and we know that that breed which is most highly esteemed, so far as you can compare a large beast with a small one, is almost exactly the same. The quality of their flesh is considered wholly unsurpassed, there being a fine degree of marble mixture of fatty matter, which cannot be surpassed. It is well known that the

nobility and gentry of England get up our Scotch kyloes as their finest beef. They are in a half wild state, and must be fed upon grass, for the Highland ox takes as long to get accustomed with a byre, as another to be fed fully fat in it. As milkers, they do not excel in quantity; but the quality is shown by the manner in which they suckle their calves. I need not dwell upon this breed, but go on to a peculiar breed, viz., that reared in Galloway, Aberdeen, Kincardine, and Angus. How that breed has come to be what it is, forms a difficult question. Whether they are a species of the West Highlander somewhat changed, and having lost their horns, I don't know; but there is a peculiarity regarding them. Those in Galloway are larger and thinner from the heuk to the tail, though not so broad as others; while those in Aberdeen are broader over the back. It may be mentioned that the latter county has at this time the honour and glory of supplying what in the London market is called pure Scots, and they carry the highest price for beef in the London market. In regard to their milking properties, I have the authority of Mr. McCombie, of Tillyfour, that they are excellent milkers; and he scouted the idea of an Ayrshire being compared with them in Aberdeenshire. I may mention that his place is by no means a garden of Eden, being without shelter on the top of a hill, and yet there are to be seen some of the most magnificent animals you can conceive. Long may the Aberdeen folks have the credit of producing the best Scots for the London market. There is another breed, called the Fife breed, which is said to have been originally a Dutch breed; but they are very few in number, and are not increasing. There are, perhaps, some present who can say something more about them than I can. I now come to the Ayrshire breed, which is one with which we have a great deal to do. That breed is generally allowed to be superior to all others for quantity of milk. The Ayrshire breeders have, for many years, been driving at that point, namely, good milking qualities, and I regret to say that I fear they have done so to the neglect of the feeding qualities. A recent writer, speaking of Ayrshires, says, that one cause of the pleuro-pneumonia is that they are bred too fine, and I am of opinion that there is some truth in this. The same writer also said, that if a breeder has a first-rate bull, he was put to his nearest relations—to his own mother, daughters, or cousins, thus breeding too much in-and-in.—Whatever causes operate to produce the effect, I do not pretend to say; but it is an acknowledged fact that the Ayrshire breed are deficient in beef and growing qualities. They are, generally speaking, narrow in the chest, and cannot have a large development of lungs, so that they may be predisposed to take injury or catch cold. In regard to pleura, it is a disease the result of a cold which has hung about the animal for many months without being observed, till it could no longer escape observation, and I believe a great deal of it results from cattle being turned out too early in the spring; and left out too long in autumn, and being allowed to hang upon their legs at the gate of a field, doing no good whatever. If we go to the original of the Ayrshire breed, it will be difficult to call it a pure breed; for Mr. Orr, of Grougar, and Mr. Campbell, of Cessnock, brought Holderness cattle to Ayrshire, while Colonel Dunlop also introduced cows from Guernsey and Holland; but

of whatever blood it be composed there can be no doubt that the breeders have been successful in producing a highly esteemed description of cattle. It is quite possible for a person looking about him in Ayrshire, to see the difference between the breeds. Near Kilmarnock the cattle are tolerably broad in the hook, having white muzzles, and a decided dash of the short-horn.—Yellow and white cows denote the Guernsey breed, while dark brownish red and tawny muzzles betoken the Alderney cow. I happened to be at a meeting at Cumnock some years ago, and saw there what was reckoned the best bull in Ayrshire. Geordie was his name, I think, and he was the property of Mr. Finlay, of Lyonston. He was of a beautiful dark colour, with horns turning up. I said, "You may call that bull an Ayrshire if you choose; but if there is not West Highland blood there, I don't know where there is any." I was afterwards informed that one-eighth of his blood was West Highland. I remember a description of Ayrshire cattle with horns turned in towards the eyes. This was called the Crummie horns; and so completely was this understood, that a good milk cow was called a crummie. It has been found that fashion insists that the horns of Ayrshires are to be turned up, and screwing has been resorted to for that purpose. But a little dash of the West Highland settles that, without any screwing at all. [The speaker then went on to defend the crossing of breeds, as it was only by that means that a perfect animal could be raised, and then went on to speak of the short-horned breed. He said:] The introduction of short-horns may be of signal benefit to this country; but I am not far from thinking that if you keep them according to the present English rules, you will not be greatly benefited by them. Some of the means at present adopted go to deprive the animal of its milking powers, and render it unnatural in its inclination to take on fat; but if they are made to keep in a good fair growing, breeding state—in fact, in that state of exuberant health which makes them suitable for breeding—the country would greatly benefit by their introduction. Unfortunately, the great run has been upon shape only, to the neglect of milking and breeding qualities. I may mention, in confirmation of my remarks about the fattening of the short-horn, that I was at the Newcastle show of the English Society some years ago, and was going round the yard with Mr. Booth, of Killerby. He was reckoned the first breeder of fat stock in Yorkshire, and was only equalled by Mr. Bates, whom he never liked to meet, so close was the competition. Mr. Booth's cattle were very high fed; and one cow he had at that show—Necklace, I think, was her name—was as magnificent an animal as one could wish to behold; but then she had, as it were, pillows of fat sewed on to her hind quarters and along her back. I remarked that the calves of such an animal must be very valuable. He answered, "I am sorry to say I have been rather unfortunate in that respect; the calf died." After expressing my regret, I said, "Do you not think she is rather fat?" He said that "Perhaps she was a little." I saw other three cows—Faith, Hope, and Charity, I think he called them—raised from this same Necklace, and more magnificent animals no one could wish to see; but I heard shortly afterwards that he had given up the whole thing, and he did not again appear as an exhibitor. On the other hand, Mr.

Bates, instead of feeding to such an enormous extent, kept his cattle in first-rate breeding order.—He told me he had got a lot of West Highland heifers, and had put short-horn bulls to them, thus producing the most admirable animals he ever saw, pictures of many of which he had hung on his walls. We must all, I am sure, regret the serious loss which has occurred at Keir, in the loss of the celebrated bull John O'Groat.—I, for one, however, was not altogether unprepared to hear of such event. If an animal is fed up to a state quite unlike healthy nature, as the rage is at present, what else can be expected? The object of what I have attempted to say is, that we should endeavor to get that which best suits our purposes by judicious crossing; and I think whether for eating, or show, or breeding, the great point is to keep them in a good growing, healthy state; and not force them beyond what is good for themselves and those who are to use them. I have now come, I think, to the end of my tether; what I have said will, I hope, excite healthy discussion, and be the means of eliciting experience and information which may benefit us all (cheers).

Mr. Stobie, of Ballockneck, passed a compliment on the ability displayed by Mr. Home in his introduction of this subject. He was not so well acquainted with the Ayrshire breed as to express a decided opinion, although he knew a cross between the Ayrshire and the West Highland breed was a great improvement. The Fife breed was a coarse animal, and such as he would not recommend to breeders, although he must say a great improvement in this breed had been made by several parties. The West Highland was, as stated by the chairman, a most excellent breed, and had all the good qualities which most other breeds were deficient in. He recommended strongly a cross between the West Highland cow and the shorthorn bull, but was generally of opinion that crossing could not be too judiciously gone about. They must begin with two first-class animals, and endeavour to get prominent in the one what was deficient in the other, and thought they should try to carry on a good breed, and not cross too often or on every point. He took leave to mention that he exhibited two cross-bred heifers at the recent show of fat cattle at Glasgow, one of which gained the first prize, and was out of a small Ayrshire cow, by a pure short-horn bull; and he must add, it was a very fine animal, and admired by everyone. He had no hesitation in saying the short-horns and first crosses were the easiest fattened breed, and in times like these, when the farmer must get his goods quickly to market, they were the best. If they got £12 or £15 for a year-old, and only some £18 for a two-year-old, they were not paid for the year's keep, and it was desirable to have that breed which was ready at the earliest date to go to market. He concluded by expressing his thanks to the Chairman for his remarks.

Mr. McNeillan was delighted to see this mode of discussion introduced, and he only hoped that in future a programme would be drawn up, in order that all the members who chose might be prepared to speak if they thought proper. Regarding the subject of the discussion, he had found the short-horn the easiest fed, and a cross between the short-horn and Ayrshire exceedingly useful—in fact, as easily fed as the short-horns; and while he had reared this class to 50 stone, he could not rear an Ayrshire more than 35 stone.

The Chairman said he was very glad to hear a list of subjects spoken of. It could not have been done on the present occasion; but after the success which had attended the introduction of the method of discussion they had that night adopted, he was of opinion that the committee of the society should draw up a list of subjects, and allow each member to choose that subject upon which he had most information, or on which he could bring to bear the most personal experience and observation. The speaker then went on to remark upon the milking qualities of the short-horns being fully equal to the Ayrshire. All the dairies in London were filled with short-horns, and the Londoners were pretty well up to the way of getting most value for their money. He had known one short-horn cow that gave 18 Scotch pints (36 quarts imp.) of milk per day, and the amount of butter he did not recollect, but it was something immense; while at Keir he believed there was a short-horn cow which was a most magnificent milker. All this went to show that the short-horn breed contains all the good milking properties, but they had been destroyed by endeavouring too much to get a monstrous fat beast. He went on to say that the first cross of an Ayrshire was good, but the second was easier fed, and the nearer they approached the short-horns the easier would they get the fat put on. He believed that the first or second cross would turn out the most profitable for feeding and milking. There was one thing he was going to mention with regard to milking, namely, that if they took a quantity of Ayrshire milk, and a much smaller quantity of short-horn milk, there was every probability that the butter of the smaller quantity of short-horn is greater than of the larger quantity of Ayrshire.

Mr. Kay, of Hillhead, in a humorous speech, advocated the utility and value of the Ayrshire breed, but said that a great deal depended upon the keep and soil. In regard to crossing, he said he had tried it, and found his best plan was to come back to the pure breed again. He said there was no accounting for the differences between the richness of cows' milk. He himself had an Ayrshire cow that gave 18 pints of milk per day (36 quarts imp.) and only three pounds of butter in the week, while he had had a little cow whose milk produced a pound of butter daily.

Mr. Gray, of Bearside, remarked that it was almost invariably the case that premiums at cattle shows were carried off by the smallest cows on the ground; and if it were possible to grow large Ayrshires, why are premiums thrown away on these small trifling animals? He related an anecdote of his going to a friend of his to purchase a bull, and when coming away he saw an Ayrshire calf which could scarcely move about. He asked what was the matter. "Nothing," said his friend; "only we must starve the calves the first year to make them fine, or they would grow up large, coarse animals." Now, he appealed to them whether this was according to nature, to starve a calf in its first year, in order that it might be small and fine, instead of what nature intended it. A good deal was spoken about cruelty to animals, and when the races came off, some of their neighbours cried out about the cruelty of the thing. Here, however, he submitted, was a much grosser instance of cruelty to animals—starving them during their infancy.

Mr. Chrystal decidedly objected to the injudi-

cious crossing, and above all things he thought that the breeds should be kept pure. If such animals could be got together as the Keir bull and Mr. Douglas's cows, he thought it would be madness to prefer crossing. He was of opinion that a short-horn bull with Angus cows would make an excellent animal; but if such were done, he would stick to the first cross, and never cross again.

The Chairman hoped, after the animated discussion they had had, that at next meeting some equally interesting subject would be brought up, and if he might be allowed to suggest, he would say that cheese-making would be a most excellent subject. Some of the cheese made in the district was good, and some nothing to brag of. He did not see why they should not be able to make cheese which would command a sale in the Glasgow market, as that from Ayrshire does. If such a subject were determined on, it might be well to have a show of cheese on the same day, when the various prize lots could be brought to table, and the system of making explained (cheers).—*Stirling Journal*.

[From the Transactions of the N. York State Agricultural Society, 1857.]

### THE INSECT PLAGUES OF AGRICULTURE.

To show the importance of the investigations which our Society is making, through the labor of our able Entomologist, Dr. Fitch, we give an article on the depredations of insects, from the Mark Lane Express, addressed to the English Farmers. The writer gives due credit to the Legislature of our State for their liberality in sustaining an Entomologist to pursue investigations so important to the agriculturist, and in fact so absolutely indispensable to his success. Allusion is made to the collection which is formed in the Agricultural Museum of the Society, which, when completed, will be among the most valuable for the farmer of any ever made. Here will be found the insects which prey upon our crops, our plants, and our fruits; and in connection with the insects, will be seen specimens of the trees, plants, &c., on which their depredations are committed, arranged in connection with the insect—and each insect being named and numbered, a reference to the report in the Transactions of the Society will furnish all the information known as to each insect, its habits, its mode of operation, and the means best calculated to mitigate or prevent its ravages. This will be a Museum of practical Entomology, which every farmer, every farmer's son or daughter, every gardener, every cultivator, can study, appreciate and understand; and it will not be long, before the great mass of the people who avail themselves of the opportunity afforded them, as we trust they will, may practically understand more about Entomology than is now known by the most intelligent among our people.

So far as we are informed, ours is the first public Museum established in this country, to accomplish this work, and our State is entitled to great credit for their liberality in sustaining the Society in making these investigations.

### DEPREDATIONS OF INSECTS.

Of the many subjects possessing a primary interest to the agriculturist, certainly the depredations committed on his crops and produce by insects and vermin are not the least important; nor is the consideration of this matter alone of inter-



est to the farmer. Every individual here or elsewhere, is at times the prey of blood-thirsty vermin—a safeguard against whose voracious attacks would be considered a veritable boon, both to individuals and to society at large. Biped and quadrupeds, animals and vegetables—all have their predatory enemies and parasites, for which, despite the "catch-em-alive-o" fly-papers, the insect destroying powders, and other alleged specifics, we have as yet no remedy. Many of the plagues of Egypt are still permitted to annoy our persons and destroy our crops.

Although at home wasps and flies are occasionally sad tormentors, and the blood-sucking pests of our lodging-houses and dwellings leave unpleasant reminiscences behind, it is only those who have seen animal life in all its profusion in the tropics who know the intense horrors and inconveniences of insect pests. There swarm mosquitoes, buffalo gnats, small black flies, horse-flies, minute sand flies; flights of locusts, chigoes depositing their nidus in the flesh, the guinea-worm tormenting one by getting under the skin. Rest is banished during the sultry hours, for the human subject; while cattle, horses, and domestic animals generally are worried so that they can neither feed nor rest. Flies get entry into your mouth, into your eyes, into your nose. You eat flies, drink flies and breathe flies. Lizards, centipedes, cockroaches, and snakes, get into the bed; ants eat up the books; scorpions sting you on the foot. Everything bites, stings, or bruises; every second of your existence you are wounded by some piece of animal life that is new to you. An insect with eleven legs is swimming in your tea-cup; a nondescript with nine wings is struggling in your beer; or a caterpillar with several dozen eyes in his belly is hastening over the bread. All nature is alive, and seems to be gathering all her entomological hosts to eat you up, as you are standing out of your coat, waistcoat and breeches. Such are the tropics. Even in parts of North America, a resident tells us,—"If you would sleep on a sweltering night in June, nothing short of chloroform will render a novice insensible to the melody of those swamp serenaders, the mosquitoes, or the tactics of their blood-thirsty ally, the black fly, who noiselessly fastens upon your jugular, while the mosquito is bragging in your face. Two remedies are at your service, either of which some persons will be found captious enough to consider worse than the disease. The first cure is the one applied to hams—smoke yourself until your eyes are like burned holes in a blanket, and you have creosote enough in your mouth to cure a toothache. The second is to smear all your assailable parts with Canadian balsam, until, after a night's tossing in your blanket you have wool enough on your face and hands to make you look, as well as feel decidedly sheepish."

It is, however, with the pests of agriculture that we are specially interested, and to which we would direct special attention. Here is a subject to which the Royal Agricultural Society might well devote itself, by bringing to bear on it the more extended practical observations of the farmers and the investigating skill of scientific men. Too little has yet been done on a broad scale in this direction. Entomologists have taken up occasionally the investigation of one or other of the predatory insects; but there are few collected details, or scientific examinations. With the ex-

ception of Kollar's work on Insects Injurious to Agriculture, and Mr. Curtis' Essays (there is one very excellent one in the last volume of the Journal), we do not know of any special treatise that enters into detail on this important matter, fraught with such large interests and high importance. Among the officers belonging to the Royal Agricultural Society, we do not find, as in New York and Paris Societies an Entomologist, and yet the agricultural crops of various kinds are even of a higher importance than the live stock. If we have a Veterinary Professor for the one, surely the ravages committed by insects on the other demand the supervision and scientific examination of an Entomologist to point out the habits of the insects, characteristics, and remedies.

The American Legislature votes £200 a year to promote the investigation of Dr. Asa Fitch, Entomologist of the New York State Agricultural Society. A most useful collection of insects hurtful to agriculture has been formed under his supervision, and much useful information obtained and promulgated. M. Edwards, the administrator and curator of the collection of Entomology at Paris, recently sent over to the New York Society a collection of predatory insects from Algiers.—In parts of Canada and the United States great ravages are occasionally committed by three distinct insects destructive to the wheat crops, which in name, at least, are often confounded—the Hessian fly (*Cecidomya destructor*), the weevil (*Calandra granana*), and the wheat midge, or wheat gnat (*Cecidomya tritici*). Almost every local Society abroad is doing something in this direction; but their labors want collecting, to be of general use. The Agricultural Board of Canada recently devoted £80 in premiums for the best essays on the origin, nature, habits, history of the progress from time to time, and the causes of the insects, which ravaged the wheat crops. The South Australian and other Agricultural Societies have all moved in the same direction. To understand in their true extent the depredations of insects, we must not, as Mr. Spence observed some years ago, confine our attention to the hundreds of thousands of pounds, which we annually lose from the attacks of the hop-fly, turnip-flies, the wire-worm, the weevil, and the host of insect assailants of our home agricultural and horticultural produce, but we must extend our views to the colonies and foreign countries. We shall there find that in Australia and British North America the potato crops are often, in some quarters, wholly cut off by the potato bug; that in the West and East Indies the coconut trees are the prey of a boring insect; that the cotton crop of India and America are frequently injured by insects of various tribes, whose history we have yet to learn; that in Ceylon, the coffee-bug commits sad depredations on the trees; that in the Straits settlements the spice-trees are much subject to the attacks of certain species of cecoci; while in Africa whole tracts of country are devastated by swarms of locusts, although these are greedily seized on, in turn, as food by the natives. It would, therefore, seem that the vegetable world has plagues far greater than ever Moses inflicted on the inhabitants of Egypt.

We see, then, that insects are the most numerous, as well as the most destructive, foes to which the agriculturist is exposed.

As Loudon observed long ago, their species are so many, and their devastations so varied, that,

without some acquaintance with their scientific classification, and a correct knowledge of their haunts and economy, their operations can neither be understood nor effectually counteracted.

What we desire to see is some good collection of insects, &c., and their injurious effects shown, which shall be available for reference both by the scientific man and the farmer, gardener and tropical cultivator. At present we have nothing of this kind on a respectable or useful scale. The Entomological Society's operations are extended to all classes of insects, and not specially directed to those injurious to Agriculture. At Kew, Sir W. Hooker has introduced to some small extent the insects which prey upon trees, &c., and the effects and diseases are partially shown.

Dr. Lyon Playfair, we believe, contemplates collecting, and exhibiting in the food department at the South Kensington Museum, specimens of the insects injurious to animal and vegetable products. But while these are auxiliary steps in the right direction, we should like to see a more concentrated course of action, and special and continued attention given to this matter by the Royal Agricultural Society.

Let that body put itself in communication with the Provincial, Colonial and Foreign Societies, and solicit their aid in replying to queries and furnishing specimens; and contributions of a very valuable character would soon be amassed, which, when arranged, compared, and described by a competent Entomologist, would result in large practical benefit, not only to our own country, but to the world at large.

We have hitherto stood high in our science and practice in all departments of Agriculture; let it not, therefore, be a reflection on us that other countries are more energetic in this minor, but very important, matter. No one can fully estimate the heavy periodical losses inflicted on cultivators, in gardens, fields and plantations, by the insect pests to which we have alluded.

*From the Southern Planter.*

#### DEFECTS IN THE AGRICULTURAL PRODUCTIONS OF ALBEMARLE COUNTY.

*An Essay read before "Hole and Corner Club, No. 2, of Albemarle Co.," by Dr. Jno. R. Woods.*

The duty imposed on me of preparing an essay on some subject connected with agriculture, has been delayed in its performance, from the fact that every topic I could think of had so often been discussed, nothing new was left at my disposal.

Under the circumstances, I shall endeavor to expose what I conceive to be errors in our system of farming, and to suggest changes which I deem necessary for that improvement and regeneration of the soil, which every enlightened agriculturist must desire. The heavy tax incurred in the purchase of Peruvian Guano, the large amount of labor and manure expended in the cultivation of tobacco and the almost universal habit of cultivating so extensive a surface, are errors which, unless corrected, must greatly retard the improvement of the country in many respects.

The delusive impression, that guano would not only produce remunerative crops of wheat, but permanently improve the soil, stimulated the farmers to purchase an immense amount, and too late, they find it to be only a powerful stimulant, losing its efficacy unless the dose is considerably

increased and ultimately impoverishing the soil.

While it has benefited a few, if it had never found its way into our country, I allude to our peculiar region, I am confident its condition would have been far better than we find it to be at this time. Enabling us as it has done, to grow wheat on soils too much exhausted for this peculiar crop, has, to some extent, paralysed efforts which we would have been driven to make, to bring them up to that degree of fertility which has been styled the wheat point. Let me suppose for a moment, that the amount expended in its purchase, had been invested in what are known to be permanent fertilizers, the different salts of lime, the sulphate, carbonate and phosphate, and food for the fattening of cattle, does any one doubt, but that the capacity of the soil, for the growth of both grain and grass crops, would have been greatly increased.

In riding over several farms, on which guano had been extensively applied, and the usual quantity of grass seed sown, I was struck with the naked appearance of the field,—I had never seen them presenting so bare and uninviting an appearance. This may be partly attributable to the several dry springs, but the repeated failure in the stand of clover for a series of years, since the introduction of guano, leads me very strongly to suspect that its application is peculiarly prejudicial to the early growth of this our most valuable fertilizer. That the expenditure of so large a sum has very sensibly increased the monetary pressure I have no doubt, and but for the high price which tobacco has commanded, the effect would be much more seriously felt. It is needless for me to enlarge on this: a subject affecting so immediately our pocket nerve, must command attention.

We come now to the remaining proposition, that the labor and manure expended in cultivating large crops of tobacco and such an immense surface, are the greatest obstacles to successful improvement. I do not wish to be understood as recommending that high degree of cultivation practised in parts of Europe, where labor is exceedingly cheap and lands enormously high, but seeing what has been done, by renters or tenants, not the owners of the land, in soils far inferior to ours naturally, should at least stimulate us to imitate their example, as far as our altered circumstances will admit.

To make the tobacco crop at all remunerative when selling at ordinary prices, not only must it occupy the choicest spots on our farms—but all of the manure gathered together from every available source must be rendered tributary to it, all other work must yield to the planting, almost endless worming and suckering, the cutting and curing, &c. To the growers of tobacco, I need scarcely allude to the everlasting struggle which a full crop entails, and the imperfect and hurried manner which all of our farming operations are performed. If we had such a soil as that of Southern Kentucky, Illinois or Missouri, where tobacco is grown, on any portion of the farm, without consuming all of the manure made, its extensive cultivation would be less objectionable, but, its application entirely to soil already good, for the production of a crop returning nothing to it, must ultimately render the largest portion cultivated in other crops still poorer. Clover and plaster may assist in preserving somewhat its fertility, but when relied upon alone, before many

years their efficacy will be greatly impaired. I by no means wish to recommend the total abandonment of the cultivation of tobacco, when commanding remunerative prices, but the making of only sufficient to give employment in weather too disagreeable for the performance of out door labor,—that the return realized for a few years, would be considerably curtailed, I readily admit; any change from the worst to the best system, will be liable to this objection.

The advantages of this change in all of its bearings, would more than compensate. It would enable us to perform all of our farming operations more thoroughly and perfectly, to erect more permanent and substantial farm buildings; to sow our wheat much earlier, making the chances for a good yield much better, and almost ensuring a good stand of grass, which is very uncertain when sown as late as we are generally in the habit of seeding a considerable part of our crop. To apply more labor and manure to the corn crop, to attend more to the making and saving of hay, a crop too much neglected and indispensable to the rearing of fine horses and cattle. To save our own grass seed, clover, timothy and orchard grass—to make better enclosures, permanent, &c., when stone was convenient—to give more attention to ditching and draining and clearing our farms of the various pests, briars, sassafras, garlic, &c.—to provide more comfortable fixtures, shelters, lots, &c., for our stock. The manure from which, protected from the rain, would be doubly as valuable, and half the feed consumed would keep them in better condition.

Our sheep and hogs, also, if protected from the snow, storms, &c., would be much healthier, consume less, and their lots properly littered would furnish valuable manure, which at present is lost.

To pay some attention to the culture of roots, which have been the basis of the wonderful revolution in English and Scotch agriculture, with more time and larger resources, to improve the quantity and quality of our manure banks, the only bank the farmer should have much to do with, and applying it to our hungry hills and ridges, thus covering them with verdure, we might profitably introduce improved breeds of stock, which under our present system would rapidly deteriorate and prove anything but profitable; and last but not least, more attention could be given to the orchard, to the planting and cultivation of the choicest variety of fruits, so conducive to health and comfort, and in addition might be made a source of considerable profit.

There are other considerations of a higher and nobler nature which I might urge; more leisure could be given to the beautifying and adorning our homes; all of our improvements have hitherto been mainly directed to providing for our physical wants; we have done but little to refine our taste or feelings; our home should be made attractive and interesting, that our children may look back to it wherever they may go, as the dearest spot on earth. The early impressions received there, mould, in a great degree, their future character and destiny.

The above views, though hurriedly and imperfectly expressed, are the result of long thought and deep reflection. If they but serve to awaken an interest in the importance of the subject I shall be amply compensated.

Ye stars, that are the poetry of heaven!—Byron.

## EDUCATION OF FARMERS.

Yet it seems to be held by many, that mental cultivation and manual labor are not intended to go together, but that a privileged few are to do the thinking for the many. It is a most insolent assumption for any individual or class to claim this monopoly of thought, and he who argues it has neither a proper respect for labor nor human nature.

So long as the best cultivation of a man is thought inconsistent with the life of a farmer or mechanic, so long will labor be thought unattractive and disgraceful. And yet the farmer and mechanic themselves often regard thought and labor inconsistent. When then they educate their children, it is not that they may be educated farmers or mechanics, but that they may escape the father's despised vocation. The "father's pride and mother's darling" must be sent to some go-cart of a seminary, to learn to extract methemathetical roots, and scorn the attraction of horticultural ones—to be ashamed of the blue frocks of his father, or the saw and axe of his sweaty brother. Then he must be barreled up in some medical or law school, or ground "to order" and labeled in some theological mill, in due time to be turned into the world, a blundering physician, a preacher who puts an audience asleep twice a week, or a lawyer who kicks conscience out of doors, on the plea that he "must live," a necessity not readily perceived by any one but himself.

By such a process the world loses many a tolerable farmer or mechanic, and, in reality, gains nothing. Now it seems to me that the farmers and the mechanics need more respect for the ways of manly industry, need to feel that labor is noble in themselves, and realize the dignity and meaning of labor; to feel that agricultural or mechanical life is consistent with and demands the highest cultivation, and that by union of thought with labor any pursuit may be made noble. This divorce of labor and thought, this division of mankind into two contrasted classes, the few thinkers and many workers, results in a loss, to a great degree, of the manly independence of each. Were the working class a thinking class, and the thinking class a working class, then the many would be less dependent upon the few for their thoughts, and the few less dependent upon the many for the fruits of physical toil.—*New York Teacher.*

**BALTIMORE CO. AGAINST THE STATE!—LARGE YIELD OF BUTTER FROM ONE COW.**—The Messrs. HAMILTON of Sweet Air, have a cow, Devon and Durham, which in the week between June 17th and 24th, gave (363) three hundred and sixty-three pounds of milk, an average of fifty-two pounds per day.

The cream of the first 3 days churned seven pounds of butter, the weather was very hot, but nothing to compare with the 4 following days, during which the milk soured before a large portion of the cream could rise. The following 4 days made 6½ pounds of butter. Total—13½ lbs. This was without the aid of a good spring-house, (having been kept in a poor cellar,) whereas it is confidently believed by keeping the milk sweet until the cream all arose, a much larger quantity of butter would have been made. The butter was of an excellent quality, knowing this from the best evidence.—*Balt. Co. Advocate.*

# AMERICAN FARMER.

Baltimore, August 1, 1858.

## TERMS OF THE AMERICAN FARMER.

Per Annum, \$1 in advance—6 copies for \$5—13 copies for \$10—30 copies for \$20.

ADVERTISEMENTS.—For 1 square of 8 lines, for each insertion, \$1—1 square per annum, \$10—larger advertisements in proportion—for a page, \$100 per annum; a single insertion, \$15, and \$12 50 for each subsequent insertion, not exceeding five.

Address,

N. B. WORTHINGTON,

Publisher of the "American Farmer,"


No. 6 NORTH STREET, 5 doors from the corner of Baltimore street, Baltimore.

## OUR OWN AFFAIRS.

We are not disposed to disguise the satisfaction with which we have received the very numerous and hearty congratulations of our correspondents, from every quarter into which the *American Farmer* goes. The manner in which our first number has been received is most gratifying, and however undeserved the commendations bestowed upon it may be, we accept them at least as an evidence of the good will of our friends and of their disposition to be satisfied with our efforts.

\* We anticipated we acknowledge a very considerable diminution of our list of subscribers among those at a distance to whom we were only known in our comparatively brief connection with the "Farmer," as one of its publishers. There has been however no such falling off beyond what is experienced at the close of each volume, but the accession of new subscribers has been fifty per cent. larger than during the same period of the previous volume, and the receipts for subscriptions nearly one hundred per cent. larger.

We will not multiply upon our pages the many evidences in our possession of the generous appreciation of our friends, which however grateful to our own feelings may be of little interest to our readers. The following from one whose praise is praise indeed, "*Landari viro laudato*," we may be permitted to quote as a specimen: "I have great pleasure in congratulating you on the very manifest improvement in the first number of the *American Farmer*, issued under your sole control and management." "I cordially unite in the kind expressions of many of your correspondents, invoking success and ample recompense upon your efforts."

 A communication will be found on another page from Lyman Reed, Esq., of this city, announcing that he has discovered the cause of the potato disease, and that he has obtained a patent to protect him in the use of a remedy which he has applied with entire success. Mr. Reed's discovery

both of the cause and remedy seems well attested by numerous certificates, copies of which he has left with us. Indeed from microscopic examinations we have made with him, we think there is no doubt that the cause of the disease is an insect, and as to the remedy we have reason to believe it to be effectual; beyond this we know nothing except on Mr. Reed's statement who assures us, it is practical, not costly, and easily applied.

We find that a Mr. Henderson, of Buffalo, seems to have made a like discovery of the cause of the disease. The insect he describes however, does not answer to the description of that to which Mr. Reed's attention has been directed, but its operations are very similar, and it is not improbable as has frequently happened in other cases, that there has been a co-temporaneous discovery of very great importance—the cause of the Potato Rot.

## MARYLAND STATE AG. SOCIETY.

We call particular attention to the change of time for holding the Fair of the Maryland State Agricultural Society. In consequence of the day first named, being the same with that determined upon for opening the exhibition of the United States Society at Richmond, the Executive Committee have concluded to take the week previous, and to open theirs on Tuesday the 19th of October instead of the 26th as heretofore announced.

We heartily commend this Society to the most earnest support of the farmers of Maryland especially. It needs now more than heretofore the efficient help of every one who feels an interest in agriculture. The heavy expenses of last year's Exhibition which will not be required this year have left the Society in debt, but it is a small debt if one tenth of the farmers of Maryland would come forward and enroll themselves as members, paying the membership fee of three dollars.

We trust that so meritorious an Institution, one that has done so much for the agriculture of the State, will not have its credit impaired or its usefulness diminished for want of such a contribution. We anticipate an Exhibition equal to any previous one. There is every guarantee in the well known energy and experience of the worthy President, Mr. Merryman and his Executive Committee, that nothing will be left undone, to secure it the most ample success.

## MONTGOMERY COUNTY AGRICULTURAL SOCIETY.

—This spirited and well governed Society has issued its Annual Premium List as usual, and will hold its Exhibition upon the beautiful grounds of the Society near Rockville on the 9th and 10th days of September.

Hon. Richard J. Bowie, is President and W. Viers Bouie, Esq., Secretary.



## U. S. AGRICULTURAL SOCIETY.

The Executive Committee of the United States Agricultural Society held a meeting at Barnum's Hotel, in this city, on the 21st July, for the purpose of completing the premium list for the great Exhibition to be held by the Society at Richmond, on the 26th of October. The list we are informed will embrace many new and important subjects, and the aggregate sum to be distributed will be more than ten thousand dollars.

Among the members who were present at the meeting were Gen. Tench Tilghman of this State President of the Society; Col. B. Perley Poore, of Massachusetts Secretary; Col. Ware, of Virginia; J. McGoman, Esq., of Pennsylvania, and J. Merriam Esq., of Maryland.

## VALLEY AGRICULTURAL SOCIETY OF VIRGINIA.—

This flourishing Society has offered a very liberal list of premiums and will hold its third Annual Exhibition at Winchester, on Tuesday, Wednesday, Thursday and Friday, October 19, 20, 21 and 22, 1858.

## OFFICERS OF THE SOCIETY FOR 1858-9.

*President*—HUGH M. NELSON, of Clarke.

*Vice Presidents*—T. F. NELSON, of Clarke; B. DAVENPORT, of Jefferson; C. J. FAULKNER, of Berkeley; R. L. BAKER, of Frederick; JOHN STROTHER, of Morgan; G. W. WASHINGTON, of Hampshire; F. B. WELTON, of Hardy; S. LEWIS, of Rockingham; G. S. MEEM, of Shenandoah; S. GIBBONS, of Page; J. S. DAVISON, of Warren; B. F. RIXEY, of Fauquier; R. L. WRIGHT, of Loudoun; JOHN G. LANE, of Rappahannock.

*Recording Secretary*—JAMES H. BURGESS, of Frederick.

*Corresponding Secretary*—PHILLIP N. MEADE, of Clarke.

*Treasurer*—GEORGE W. WARD, of Frederick.

*Marshall*—To be supplied.

*Curators*—JAMES BOWLES, JONATHAN SMITH, HENRY M. BAKER, LEVI HIETT, BEVERLEY RANDOLPH, JAMES W. MASON, NATHANIEL BURWELL, JAMES H. KEMP.

## EDITORIAL NOTICE.

We have the pleasure to announce, that we shall be aided in our duties henceforth by a gentleman whose general attainments and experience, as a writer on rural affairs, will afford us very efficient assistance in the conduct of the *Farmer*. We are not unmindful of our promise of progress in the management of our Journal, and we shall adopt from time to time such means as lie in our power to that end. We have now obtained not only valuable direct assistance, but such as will afford us more time for editorial labors. We hope to develop gradually changes and improvements, which will make the *Farmer* more acceptable and indispensable to its many friends.

## SLOW SUBSCRIBERS—THE REASON WHY.

A subscriber in Mississippi, sends us ten years subscription to the *Farmer*, and one in Louisiana thirteen. Our Mississippi friend admits that it is doubly due, because the paper is certainly worth to him twice its price. He enlightens us too on a point which has puzzled us "some," viz: why our slow friends won't pay? "My principal reason," he says, "is shame, arising from a sense of the injustice I have done you."

Now if that's all, we can argue with our friends, let them remember the longer they wait, the more the shame. "On horrors head, horrors accumulate."

We are very glad to find from the tone of our correspondent's letter and its solid contents, that there is good metal in these delinquent gentlemen, if it can be got out of them.

✍ Subscribers remitting a dollar frequently ask us to send receipts. We have usually complied with their request, but they have accumulated so rapidly during the past month, that we have been obliged to neglect them. Our friends should bear in mind that besides the trouble, paper and envelop the cost of a stamp is 3 per cent. of the subscription. They should at least send us a stamp.

✍ Our correspondents whose letters require answers will please bear with us a while. We will attend to their favours shortly.

✍ Persons writing with reference to subscriptions will please name distinctly the *Office at which their paper is received*.

KNOWLEDGE.—There is no power on earth which setteth up a throne or chair of state in the spirits and souls of men, but knowledge.—*Bacon*.

## INDISCREET TEACHINGS.

Those who take an interest in Agricultural improvement, and think that Agricultural Journals are useful instruments to that end, should take care lest they put weapons in the hands of their enemies. Some of our exchange country papers in Maryland and Virginia we find copying the following from a New York Journal, "June—work to be done. The Farm. The most important business for this month is the accumulation and preparation of manures for autumn use." Now we are not so familiar with the farm practices of New York as to determine the worth of such a suggestion where it originated, but transferred to Maryland and Virginia the absurdity is so apparent that it can have no effect but to discredit everything originating from a like source. Imagine a grain grower of either of these States, or worse a great deal, a tobacco grower in this past month of June, straining every nerve, toiling and sweating, and happy if he could bring under the grass crop which threatened to take possession of corn, to-

bacco and potato fields—imagine we say his disgust at being told in the midst of his labours, that he is all wrong, he ought to be “*accumulating materials for making composts*,” to cover his hundred acre lot next fall for-sooth!

But another faithful adviser of the tobacco grower, hailing from New York, tells him to sow his tobacco seed the first week in March, and the last week of the same month he must begin setting out his plants. What would a Maryland planter think of it, and what would he infer as to the value of other advice from the same source; and what might he not with some show of reason infer as to the propriety of consulting any Agricultural Journal? Some people are satisfied with weak arguments, and would be willing enough to use this if it suited their prejudices.

#### HORSE TAMING AND HORSE TAMERS

Evidently the scientific world is just now in want of a term to convey, in one word, the renowned art of subjugating the reluctant steed—we propose, “*Hippodamy*,” for the art, and “*Hippodamast*” for the practitioner, and hope they may receive the same airing, at least in the pages of our contemporaries, that some other less worthy foreigners have received in the press at large.

The famous Mr. Rarey, has astonished the natives of the United Kingdom and of France; and by his exhibitions before Royal and Imperial spectators, has given to his vocation a prominence and a dignity as sudden as unexpected. But it seems he is not destined to enjoy his laurels without a rival, and others, in this country, and in Europe, claim equal skill, and, some even priority of discovery. Horse tamers and “*whisperers*” as they were formerly called, it is true there have been, and long before the advent of Mr. Rarey, but this does not at all detract from the well earned reputation of the celebrated American now in Europe; for none of those who preceded him have been able to perform such feats as our fellow countryman, nor have they been able, or if able, willing to impart a knowledge of their art to others. Circus riders have taught their horses to perform extraordinary exploits, but the subjects of their instructions have rarely possessed either very vicious or very obstinate dispositions; but are on the contrary, selected with great care on account of their docility. Mr. Rarey, however, deals with “all sorts and conditions of horses,” and his victory over the zebra is entirely without example.

It is in vain to attack the art of Mr. Rarey by ridicule, though the excesses of enthusiasm into which some of its admirers have been led has afforded scope to the wit of the ever mirthful pages of Mr. Punch. The high value attached abroad to a successful practice of *Hippodamy* (to use our

new word), is easily to be estimated by any one who has looked into the European Journals of the past year; and the pages of publications in our own country show an interest, here, quite as absorbing. There was to have been at the Monroe county (N. Y.) Agricultural Society's Horse Show, on the fifth of July, a practical exposition of Mr. Rarey's system of Horse Taming, by competent men, whose services were to have been secured by the Society. We know not whether such an exposition took place, but we are sure that at all the Agricultural Exhibitions, and particularly at the Horse Show to be held at Springfield, Massachusetts, in the coming autumn, such an addition to the programme would add no little interest to the display. The Ohio Cultivator, for July, expresses a wish that will find an echo in the breast of many outside of the Buckeye State, and gives us some information in relation to Mr. Rarey and his family, that we have not, elsewhere, seen: “we wish, says the Editor, ‘the Ohio Board of Agriculture would engage our neighbor, Hon. Wm. H. Rarey, who is the original Horse Tamer and elder brother of John S. Rarey, now in Europe, to exhibit his power over wild or vicious animals, at our State Fair. The secret is well known to many, and is no longer a secret, and will soon be as commonly exhibited as horse-shoeing is. We have known Mr. Rarey's method for a long time, and since it will be impossible to keep so simple and effective an operation much longer in private hands, we should much prefer that Mr. Rarey himself should have the honor of making the exposition, and thereby put a stop to the swindling pretences of mountebanks and counterfeit imitators. Our personal regard for Judge Rarey, prompts us to take the responsibility of this proposition, of our own motion entirely.’” We offer the suggestion to the consideration of our own State Agricultural Society, so that they may secure a similar attraction at our next State Fair, if they deem it expedient.

From a paragraph published a short time since in the Washington Union, it appears that Mr. Denton Offutt is of opinion that Mr. Rarey, now in Europe, is indebted for his knowledge of the system of subduing wild or vicious horses, to his instructions, given either practically in person, or through the medium of a book, several years since published by himself. What truth there is in this allegation, we have no means of deciding. Mr. Offutt's name is well known in this State, and he certainly performed some feats, with horses that had been supposed incorrigible, almost as surprising as some of those of Mr. Rarey. One instance of uncommon skill in his art, will be recollected by many citizens of Talbot county, to have been given by him, several years ago, in the town of Easton, where he completely subdued a very high

spirited horse, in a few minutes, and rode the animal through the streets without touching the bridle, and beating a drum upon her back.

Another candidate for fame in the art of Mr. Rarey, has appeared in the person of Mr. Caleb H. Rarey, from whom we have received a circular, giving some details of his *modus operandi*; but as he professes to dispose of his secret for a consideration, and we do not desire to interfere with his emoluments, of course we are not at liberty to make extracts.

Various dates, without going back to Alexander and Bucephalus, have been assigned to the earliest practice of this mysterious art; and various solutions of the enigma itself have been attempted.—One writer states, in a London paper, that he has seen the means employed by Mr. Rarey, practised at St. Petersburg, in 1818; and another yet earlier; whilst another quotes "Catlin on the North Americans," to show how not only the horse, but the young buffalo, may be compelled into abject submission and obedience to man. In the authority last quoted, gentle breathing into the nostrils of the animal, is said to be the method employed; but, in all, absence from great passion and violence in the operator, seem to be indispensable.—In a communication by J. H. Longworthy, Veterinary Surgeon to Her Majesty, made last February to the Messrs. Tattersall, he states that Mr. Rarey has made him acquainted with his method, and that "neither stupefaction by inhalation, nor narcotic, nor any mesmeric influences were resorted to."

Every one is familiar with one of Mr. Rarey's most remarkable performances, the taming of the horse "*Cruiser*,"—and to know how to exercise such power, it is almost needless to say, would form a most important branch of a perfect farmer's education, and should be acquired at our agricultural colleges.

Since writing the above, we find by our Western exchanges, that Mr. Rarey, of the European renown, has a brother who is giving exhibitions in the mysterious art, in Cincinnati; and another brother in Indianapolis, who is giving specimens of his skill in the same accomplishment. In fact, the whole family seems possessed of the "*secret*." The brother in Europe writes, in April, to his nephew in America, and, in the concluding portion of his letter, speaking of the enthusiasm his presence excites among the people, says: "The streets outside of the building, were crowded, and when I rode out on the back of a vicious stallion, whom no man had been able to mount for three years, they too set up a loud hurrah for the great American, that they think I am. They don't know that I am nobody but your uncle Jack, that used to break horses in the little town of Groveport."

R.

### "PEAR CULTURE."

The above is the title, in part, of a new work by Thos. W. Field, just published by A. O. Moore, the well known agricultural book publisher, at New York. The work is termed in the remainder of the title, "A Manual for the propagation, planting, cultivation and management of the Pear Tree, with descriptions and illustrations of the most productive of the finer varieties, and selections of kinds most profitably grown for market."

Fruit-growing has now attained such rank and importance among the pursuits of the age, that a single work cannot be made sufficiently condensed to contain all that is needed for proper instruction in the production of each kind. The grape and the strawberry have each devoted to them specially, manuals of great excellence; but the pear, which is of quite as much importance as either, and of more importance than the strawberry, has hitherto been denied the honor of a separate treatise. In the pages of Downing, however, it has had large space devoted to it, and there, careful and elaborate descriptions have been given of the very numerous varieties that modern skill and industry have introduced. Other writers, American and European, have not failed to give abundant room, in their pomological treatises, to the pear; but in works professing to treat of many different kinds of fruit, it was not possible to enter into that minute and comprehensive detail requisite to a perfect manual for each.—Mr. Field has undertaken for the pear, what Buchanan and others have done for the grape, and several have done for the strawberry.

The author says in his preface, that the design of the work is "to answer, in a clear and intelligent manner, the oft-repeated questions of the novice: 'What kinds of Pear trees can I plant most profitably?—and how shall I treat them, to insure a return of the investment?'"

We can say, with great truth that he has adhered very faithfully to this text, and deserves the highest encomiums for the very valuable material he has collected and condensed in the Manual now before us; and the more so, because of the absence of all pretension, and of all assumption of the "*ex cathedra*" style, in any part of the work. This is the first work of the kind exclusively devoted to the Pear, that has yet appeared in this country, and of course is not, nor does it claim to be, quite perfect; but whatever defects it has, will doubtless be supplied in future editions. The late Mr. Manning, it is true, published a small book, many years ago, chiefly upon the Pear; but that was when the cultivation of the fruit was comparatively in its infancy in this country, and his work consisted chiefly of plates, accompanied by descriptions of varieties. Mr. Field, in the Manual un-

der review, which is a small volume of 286 pages, devotes but seventy pages to descriptions of varieties; the rest of the book is occupied by matter appertaining to the rearing of the tree, the diseases by which it is attacked, and the gathering and disposing of the fruit. There are descriptions of some sixty varieties, esteemed by the author as most valuable; and almost every description is accompanied by a lithograph of the fruit. The instructions for propagating quince stocks, for rearing pear seedlings, for grafting and budding, for planting, for pruning and training, as well as the account of insects injurious to the pear, are all accompanied by well executed lithographs, much enhancing the value of the text.

In almost all that the author has said upon the subject of the cultivation of the pear upon the quince, we fully concur; and hardly think the recent attempt of one or two malcontents, will have any effect to deter persons from planting trees grown upon that stock. As an evidence of how popular the pear grown upon the quince has become, Mr. Field states in his preface, that "the introduction of the French method of propagation upon the quince stock, has given such an impetus to the cultivation of the pear, that the sales from a single nursery in this country, reach the enormous number of half a million of trees in one year." In this connection we will state, that Mr. Field quotes largely from the very admirable letter from Mr. M. P. Wilder to Mr. Stoms, which was so extensively published during the past year.

The author's directions for cultivation are excellent; but we hardly think any one who propagates extensively, will be likely to make much use of the "quill," (of which he gives us two lithographs) in detaching the bud for inoculation.—His list of varieties that do not do well on the pear stock, unless when double worked, includes the "Seckel." Now here we find no trouble in rearing the Seckel immediately upon the quince stock, and producing, in consequence, the largest and finest fruit of that variety. The Madeleine, he states, succeeds well on the quince; here it does not, and cannot be successfully grown on that stock, except through an intermediary.—Soil and situation seem to produce such effects upon the pear, that it is almost impossible to predicate a precisely similar result, from the cultivation of the same variety in the same latitude, or even within a few miles, still less when climates differ. Hence we must receive with great caution, the opinions of even the best cultivators at the North, upon the excellency of a variety, previous to trial here. Mr. Field does not appear to hold the Seckel in the same high esteem as some other cultivators, but in this State, we believe, it stands

unsurpassed in its season. The lithograph represents it as below the average size attained in this latitude, and we may remark the same of the drawing of the Madeleine.

Of the sixty varieties described by Mr. Field, if he intends them to comprise, as we believe he does, the best, we would remove the names of many, and replace them by those of others that we conceive to be far superior. The omission of the "General Taylor," one of the finest table and market pears grown in the neighborhood of Baltimore, we hope to see remedied in the next edition.

In a work otherwise so meritorious, we regret to see a number of instances of incorrect spelling of the names of fruits: "Amaulis" and "Amalis" instead of *Amanlis*; "Seckle," instead of *Seckel*; "Gifford," for *Giffard*; "Buffam," for *Buffum*; "de Hardenpont," for *d'Hardenpont*, and some others; and though, in general, there is very little to find fault with in the book upon this score, yet in some places the name of the same fruit is correctly spelled, whilst in others it is not. The mode in which the catalogue of Native Varieties, at the end of the book, is made out, in which the "locality of origin of each sort" is given, is such as nurserymen would do well to imitate. Some of the localities, however, are not correctly given. The Seckel, for instance, did not originate at Germantown. Did space permit, we should give some extracts from this valuable Manual, but hope in our next issue to give it, and the subject of which it treats, a further notice. R.

#### THE GRAIN INSPECTION LAW.

The following correspondence will exhibit the process through which the Inspector General of Grain and the buyers of grain have brought their controversy to the crisis of a trial of strength in the courts. The dealers require the Inspector to weigh "all the wheat"—every bushel. The Inspector, on the ground that the usage of fifty years in the market, makes one bushel in sixty a sufficient weighing, refuses to weigh every bushel, but professes a readiness to weigh according to his construction of the law. The purchaser, on this, proceeds to consummate his contract, without having the grain weighed by the Inspector. The Inspector gets a warrant issued against the parties, on a charge of violating the grain inspection law, and the parties get injunctions to stay further proceedings under the warrant, until the matter can be heard in court; and claim that the Inspector violated the law, by his refusal to weigh every bushel of grain.

The gentlemen who represent the dealers, in this controversy, it will appear, do not object to the law as they interpret it, but only to the man-



ner in which the Inspector thinks proper to execute it. Indeed, it is only their new-born zeal for the law, which induces them to establish a sort of police or vigilance committee, to see that the Inspector conforms strictly to its provisions. If this feature of the law is complied with, they say, we will be "among its warmest supporters."

We do not suppose that the new law contemplated the weighing of "all the wheat," and if that shall appear to be its literal construction, the course of the purchasers will be not the less construed into a design to defeat its whole intention. The practice of weighing a half bushel in thirty, has been universally concurred in heretofore, so far as we can learn, by both buyer and seller, and to make the continuance of this practice an excuse for breaking down the whole system of inspection, will be looked upon of course as only another evidence of their hostility to the law, and will increase the determination of grain growers to sustain it:

No. I.

BALTIMORE, July 9th, 1858.

WM. FRAZIER, Esq., Inspector General, &amp;c.

Dear Sir:—We have this morning purchased from Mr. Wm. S. Pawson, under inspection, one hundred and twenty bushels of Wheat, which we are now ready to have measured and weighed, under the existing law. You will be kind enough to give this immediate attention, as the Wheat is all started and in our way.

Yours, truly,

(Signed,) DAVIES &amp; WARFIELD.

No. II.

Messrs. DAVIES &amp; WARFIELD:

Gentlemen:—Your request came to hand, and in reply would say to you most respectfully that we intend to be governed by the old system of weighing Wheat, that is one in every sixty, and when the measurer whom we have appointed to measure the Wheat, has measured it, and we are notified by the Captain or Commission Merchant it is ready to be weighed, we will attend to it with the utmost pleasure.

Yours, most respectfully,

(Signed,)

W. FRAZIER,

per Wm. GODWIN, Jr.

Baltimore, July 9, 1858.

No. III.

BALTIMORE, July 9th, 1858.

WM. FRAZIER, Esq., Inspector General, &amp;c.

Dear Sir:—Your courteous reply has been duly received. Approving of your construction of the law yesterday, in relation to the Wheat delivered by you to Messrs. Lee & Welby, we made the purchase of the Wheat this morning from Mr. Pawson. All we ask of you is to treat us as you have our neighbors. We ask you to determine the weight of all the Wheat we have purchased from Mr. Pawson, in accordance with the law. You have already been duly notified by the commission merchant and captain. Should you conclude not to weigh this parcel of Wheat in the same manner you did for Messrs. Lee & Welby, we now formally notify you that we shall, in accordance

with the old custom, measure and weigh it at one o'clock.

Very respectfully,

(Signed,)

DAVIES &amp; WARFIELD.

No. IV.

BALTIMORE, July 9, 1858.

Messrs. DAVIES &amp; WARFIELD:

Gentlemen:—Your note of this date is just at hand. In reply, we beg to say that the Wheat weighed for Messrs. Lee & Welby yesterday, does in no degree fix that method as the legal one of weighing Wheat. It was done in that instance as a matter of accommodation to the Captain of the vessel. In weighing all cargoes we are governed by the uniform usage and custom which has prevailed in this and other markets for more than half a century past, and we cannot be called upon to depart from this system. We hope the obvious propriety of this course may induce you to permit the Wheat sold under the Inspection Law, to be weighed as the law requires, according to usage and custom established by the late law.

We hereby respectfully notify you that we are prepared and ready at any moment to weigh the Wheat, and should you disregard the requisitions of the law, it is at your own hazard.

Yours, very respectfully,

(Signed,)

WM. FRAZIER,

per Wm. GODWIN, Jr.

No. V.

BALTIMORE, July 9th, 1858.

WM. FRAZIER, Esq., Inspector General, &amp;c.

Dear Sir:—We have received yours, No. 2.—You will not be surprised to learn that your failing to attend to our request to weigh the Wheat purchased from Mr. Pawson, in accordance with existing law regulating the sale of Grain in the city of Baltimore, has forced us to receive it in accordance with the old custom. You have never refused the right to weigh and attend to it. You have entirely disregarded our notification, that we were prepared to have the Wheat weighed, and as far as our judgment serves us, placed yourself in a hazardous position. You are at liberty to take whatever course you please, and we are prepared still to make the same demand upon you to fill your duty and to construe the law in plain English. You have made an exceedingly lame excuse, with regard to your course respecting Messrs. Lee & Welby. We do not care in what quantity you may see fit to weigh Wheat; all that we want you to do is to weigh all the wheat and carry out the letter of the law, and then we will become amongst its warmest supporters.

Very respectfully,

(Signed,)

DAVIES &amp; WARFIELD.

## OUR EXCHANGES.

Among the many kind and friendly things our Exchanges say of us we find the following in the Scottsville, Va., Register, which we quote as a sample:

After every farmer in the community has subscribed for the "Register," we would advise them to take the American Farmer, printed in Baltimore. A vast deal of useful information to the farmer can be derived from this work. We heard one of our most successful farmers say that rather than be without it he would pay \$12 a year for it. Price \$1.

## THE CROPS.

We have thrown together below, extracts from the letters of correspondents, and from our country exchanges of Maryland and Virginia, not for the purpose of showing the deficiency in the crop of wheat in these States, but to indicate, as coming from various points, the general character of the evils from which it has suffered. The excessive rains of the earlier portion of the season, and the blighting suns immediately following, are the chief causes of the failure; rust and scab, and escaping these, a premature drying up of the grain, were the effects of the weather. We give here the evidence of these, from direct sources, and there is no doubt whatever, from other evidences, that the same causes have affected the crop throughout the wheat growing region, with small exception. The rains, except in several of the Southern States, were almost universal, and the most destructive floods, in consequence, occurred in various sections. The blighting suns of June, were as general as the previous rains, and we hear in consequence of rust, and scab, and blight, from every quarter. Beside these, floods, tornados and hail storms have devastated numerous sections. In Western New York, the midge, as usual, has done its work, and extended into Ohio and other of the Western States.—The damage by fly and joint-worm, though very considerable, has been of course much more limited. Of the crop of oats, it may be remarked, that from every section of the country and almost without exception, it is pronounced a failure, from the same causes affecting so generally the wheat, viz: rains, followed by hot suns.

As to the amount of the deficiency in the wheat crop, it is exceedingly difficult to estimate it.—Taking Maryland and Virginia, from which we have direct information, in a large number of oral reports, in addition to the letters of correspondents and the local papers, we could scarcely put the yield above half of an average crop, taking quantity and quality into the estimate. It is true, that the promise of the crop was unusually fine, and there was straw enough upon the ground to have made far more than an average yield. A failure of one-half upon the early prospect, would still have left us more than a half of the usual average. How far the anticipation of the early spring, rather than the usual average, may have been contrasted with actual results, in the many reports made, it is impossible to say; but we think the most hopeful estimate, all things considered, could not exceed two-thirds of a crop.

For the country generally, with little direct evidence from which an estimate could be formed, knowing the existence of the same causes which

have proved so disastrous nearer home, we infer the same effects. Whether to the same extent it cannot be determined, but certainly to a degree which in connection with the thousands and thousands of acres in the valley of the Mississippi and its tributaries, which have been entirely submerged, must very materially shorten the crop.

The crop of corn though later than usual has improved and come forward very finely during the past month. The prospect at present is very favorable.

Up to the middle of July only about half of the tobacco crop of Maryland had been planted, and this having been planted in May and June was forced up rapidly during the hot and dry weather, making a poor growth. The rains which began to fall again about the middle of July, enabled those whose plant beds had not been burned up to finish their planting. We do not anticipate however that with the most favorable weather for the remainder of the season, there can be anything like a full crop.

The crop of oats is very short every where, having been very generally affected by rust, a very unusual thing, and blighted by the hot suns.

### From our Correspondents.

*St. Michaels, Talbot Co., Md.* July 7th.—“We are through with our harvest and I regret to say our wheat is not near so good as was anticipated. All kinds are hurt, some by the rust; and latter wheat is nearly worthless from scab. I feel confident our crop in the country will fall below two thirds of a crop. Large crops of straw. Corn looks fair.—It is latter.” Yours, J. C. A.

*Near Seaford, Del.* July 8th.—“We have just harvested a very heavy crop of straw and a very light crop of wheat. The rust did its work effectually for us. The hot dry weather has dried up our oats before the grain could mature, and the oat crop will be a light one. Early potatoes will be a failure without a rain soon, and corn is beginning to twist and curl up for want of moisture.”—Yours, &c., W. H. R.

*Peakville, Bedford Co., Va.* July 10th.—“When we went to cutting our wheat we found the damage (by previous rains) had been done, and if we get half a crop and that of inferior quality we shall get as much as we expect.” “Our tobacco planters have had a fine time for setting their plants and have availed themselves of it. A much larger crop than usual has been planted, which looks very promising.”—A. A. J.

*Wing field, Hanover, Va.* June 1st.—“Joint worm and fly are again committing their ravages on the wheat crop. Mine from present appearances will be not more than half a crop. Corn extremely small for the season. Col. Rouzee speaks of crops in Eastern Virginia as very much injured by joint worms, &c.”—R. H. N.

*Wilmington, Orange Co., Va.* July 9th.—“The wheat crop in this neighborhood will be below an average. Growth of straw very fine, quantity of grain perhaps an average, but of most inferior quality. Good seed wheat will be scarce. Corn backward and very grassy.” Yours, &c., R. P. G.

**Frederick's Hall, Louisa, Va., July 8th.**—"The crops in this section are far from promising. The wheat will probably measure out rather over half a crop, but I do not think it can weigh over 50 lbs. to the bushel. Tobacco is either too forward or too late. That which was planted early is very sprindling and much of it in bloom, while the late planted is very much missing and very small."—D. H. P.

**Big Lick P. O., Roanoke Co., Va., July 8th.**—"The crop of wheat in this county is harvested and falls far below an average. It was injured by fly, scab and rust. Corn and tobacco promise well. Thus far this county has borne off the palm for fine tobacco for manufacturing."—G. P. T.

**Ivy Depot, Albemarle Co., Va., July 9th.**—"We are just through our harvest, which is a heavy crop of straw; but not more than half a crop of wheat, and that of inferior quality. Corn and Tobacco looking well, though very foul."—G. B. S.

**Capeville, N. C., June 10th.**—"Our wheat has the rust so bad that there are fears of an entire failure of the crop. Oats and corn look well. Sweet potatoes are dying from some unknown cause; the sprout commences at the root to rot, and dies in less than two days."—E. C. T.

**Lexington, N. C., July 15th.**—"We have harvested in this and the counties around about 5-8ths of a full crop of wheat and oats, and have growing a promising crop of corn and cotton. The cotton crop planted is about one-half of what it was five years ago."—W. R. H.

**Smithfield, Isle of Wight Co., Va., July 9th.**—"With us the wheat harvest is just over. Something less than an average. Corn, although late, is looking beautiful."—G. S.

**Fosterville, Tenn., July 19th.**—"We have a fine prospect for a corn crop. The wheat crop from a half to two-thirds. Oats nearly a total failure."—W. C. W.

**Near Staunton, Va., July 21st.**—"Corn, clover, timothy and vegetables all looking well. My wheat as well as that of some of my neighbors suffered greatly from fly and rust. I shall not make half a crop. But a few days ago, I had a fair prospect of making from 800 to 1000 bushels of oats, the rust took it, and after cutting about one-fourth I have turned my stock upon it."—Yours, &c., C. S. G.

**MARYLAND.**—From our exchanges, we take the following:

**Kent.**—Wheat. We are confident that two-thirds of a fair crop will not be made. The fly has so completely ruined many fields, that it is now doubtful whether they will pay for harvesting.

**Cecil.**—The wheat crop in the county may be set down as more than average.—*Whig*.

**Caroline.**—Of wheat, there will, perhaps, be a full average yield in the county.—*Journal*.

**Talbot.**—Wheat. One of our largest and most intelligent farmers informs us that the shocks this season will turn out about half what they should, and the wheat will be only half as good. There is a heavy yield of straw, but the wheat is light and inferior.—*Easton Star*.

**Dorchester.**—Wheat. We believe it is generally concluded that not more than half a crop will be made while a great many think it will not be a third.

**St. Mary's.**—The wheat crop is even worse than we have stated. In many cases the wheat has been cut for the straw alone.—*Beacon*.

**Prince George's.**—Tobacco. We have heard from all sections of the county, and the universal opinion is that there is not more than half a crop in the ground, and not over that quantity can be raised this year. The corn crop has suffered severely—the wheat crop now just gathered has proved in many cases to be a failure.—*Gazette*.

**Montgomery.**—Many are of opinion that the wheat crop will fall short of the usual average—owing to the fly, joint worm, rust and scab.—*Sentinel*.

**Washington.**—Wheat. Making due allowance for unnecessary alarm and idle croaking, it cannot be denied that the crop will fall far short of an average one in the county.

**Frederick.**—Wheat. The best opinion seems to be, that the yield will fall much short of the usual average; in some localities the falling off, from blight and rust, is fifty per cent. and perhaps more; while in others it is small. All agree that an immense quantity of straw is made, but that the yield of wheat is deficient. What we have, however, is of prime quality for flouring purposes, and should command the highest prices.—*Examiner*.

**Carroll.**—Wheat. We think it likely, from all we can learn, that throughout the county the crop will not be more than half of an average on the ground that was cut, but the breadth of land that was devoted to that crop being much larger than usual, it will to some extent bring up the aggregate yield of the county.—*Sentinel*.

**Anne Arundel Co.**—The *Annapolis Gazette* says: "The wheat in this County is a miserable failure."

**Worcester.**—"Our farmers have secured their wheat and oat crops. They are both light. The corn crop looks well, and promises a favorable yield."—*Worcester Shield*.

#### VIRGINIA.

**Hanover, Henrico and King William.**—A correspondent of the *Richmond Whig*, speaking of these counties, says: "So far as my range of observation has extended, it may safely be affirmed, that the yield of all, grain will be very short. In recapitulating the causes of a short crop in Virginia, I have said nothing of the entire destruction of many crops in Caroline, Westmoreland and elsewhere, by the late terrific hail storms."

**Rockingham.**—The wheat and oats in this county have been pretty nearly all harvested, and the wheat will not yield more than half a crop. What there is, is very inferior, and we are informed some of it will not weigh more than 45 or 50 pounds to the bushel.

**Cumberland, Buckingham and Appomattox.**—We very much regret to hear that the wheat crop in the counties of Cumberland, Buckingham and Appomattox will be cut short at least one-half, by the joint-worm.—*Fred. Herald*.

**King George.**—The *Fredericksburg Herald*, speaking of the losses by hail, on the 18th of May, says: "The losses in the four or five counties which adjoin, cannot be short of \$100,000, and we fear reach to \$150,000, if the information we have from King George, embracing a length of ten miles, and breadth of only 3 miles, can be regarded as a fair

index of the fury of the storms in other quarters." "In all, about 30,000 bushels of wheat destroyed within a length of 10, and a breadth of 3 miles."

*Frederick, Clarke, Jefferson*—Corn crop.—"In Clarke and Jefferson counties, the prospect for corn is still more flattering than in Frederick, but in all this region there is the brightest promise now of a good crop. We hope it may not prove delusive, as in the case of the wheat crop."—*Virginian*.

## AMERICAN CATTLE.

### THE DEVONS.

What the turf horse, and its ancient progenitor, the Arabian, is among horses, the Devon is among cattle. They are claimed in England as an aboriginal race, and to have existed in the island previous to its conquest by the Romans. Yet, from all accounts, the Devon has, from the earliest times, been confined chiefly to the county which bears its name, and the immediate confines of those adjoining, in the south-west of England. Nor does extraordinary attention appear to have been given to the improvement of the breed until the latter part of the last century, when the high prices, and great consumption of native beef in Great Britain, to feed her armies, having fearfully drained her cattle districts, awakened the attention of the few breeders of Devonshire, who still held their cattle in their original purity of blood, to their extraordinary value. The northern part of that county appears to have been their favored home. The soil and climate eminently suited them, and with the care and attention bestowed upon them by their breeders, for the past sixty or seventy years, they have improved in quality, appearance, and blood-like style, until they can be mistaken for no others with which they have any relation. The wild deer of our forests have no stronger marks of original descent than the well-bred Devons of the present day; and in uniformity of appearance, and identity of blood, they are scarcely more homogeneous.

An idea has prevailed to a considerable extent, that the red cattle of New England are essentially Devons, from the fact that the first settlers of Plymouth came from Devonshire. There is no sort of proof in that, for no cattle were imported into New England until four years after the arrival of the Mayflower, and neat cattle were imported from all parts of the coast of England to the new colonies when an active communication had become established between the two countries.—At all events, the New England red cattle are exceedingly unlike the well-bred Devons of the present time, and only resemble them so far as their approach to the same color, sprightliness of action, and an upturned horn are an indication.—An occasional well-bred Devon may have been imported into New England during the last century, and left an infusion of its blood in certain neighborhoods; but nothing like an established herd of the kind has been known there until within the last thirty years. The first animals—six heifers and a bull—of pure North Devon stock, in the United States, of which particular note has been taken, were imported by Mr. Robert Patterson, into Baltimore, Maryland, in the year 1817. A few more were imported into New York, by the late distinguished statesman, Rufus King, of Jamaica, Long Island, about the year 1819—both from the fine herd of the late Earl of Leicester,

then Mr. Coke, of Holkam, in the county of Norfolk, England. A few years afterwards, some of Mr. Patterson's stock were taken into Connecticut, and successfully bred. In 1835, the remainder of the Patterson stock went into the hands of Mr. George Patterson, of Skyesville, Maryland, who has skillfully bred them, with occasional importations of a fresh bull, up to the present time. Mr. King bred his stock, occasionally parting with an odd animal, until his death many years ago, when his herd was broken up and dispersed. These were all well-bred cattle, originally procured in Devonshire by Mr. Coke, who considered them admirably adapted to the light soil of his extensive estates in Norfolk. From the herd of Mr. Patterson, many animals were distributed into various parts of the country. About ten years ago, and since, at various times, several enterprising cattle breeders made selections from the best herds in Devonshire, and brought them into Massachusetts, New York, Georgia, and the Canadas. They have been eminently successfully here, and now several herds exist, of purity in blood, and high quality—not excelled even in England. The Devons have thus become an established breed of cattle in the United States and in Canadas.

### DESCRIPTION.

The pure North Devon is medium in size, and less than the short-horn, or Hereford. They are red in color—originally, a deep blood red, but latterly, they have in England bred them of a lighter shade, but still red—a fancy shade merely, the other characteristics remaining the same.—The head is short, broad, and remarkably fine, with a quick, lively, prominent eye—encircled with an orange-colored ring; and a slender, branching, upturned horn. The neck is fine, with little tendency to dewlap; the chest full, with a slanting shoulder, more open of late than formerly; a straight back, with full round ribs, well thrown towards the hips, and a projecting brisket. The loin and hips are broad and level; the rumps in good proportion, and the tail well set, round, and tapering like a drumstick into a tuft of mixed white hairs at the end. The flanks are deep and level; the thighs somewhat rounding above, and running into a graceful taper at the hock, with a leg below of surpassing fineness and strength.—The fore-arm is large above the knee, but below, the leg is exceedingly fine and muscular. A patch of white is occasionally found at the udder, and rare instances extending forward to the navel, but in a majority of cases, perhaps, the white does not occur. Taken altogether, no animal of the cattle race exists, which in conformity of color, style, symmetry, and blood-like appearance, exceeds the Devon.

### AS A BEEF PRODUCING ANIMAL,

No creature of the race this side of the Atlantic equals it in fineness of grain, delicacy of flavor, and economy in consumption. Its fineness of bone and freedom from offal make it a favorite with the butchers, and a choice to the consumer. In England it is preferred to any other beef excepting only the Galloway and Highland Scot, and bears, excepting those, the highest price in her markets. He matures early—hardly so early, perhaps, as a short-horn—but at four years old is fully ripe for the shambles, and at three, good. He is a kind and quick feeder, with finely marbled, and juicy flesh, and no bullock makes better profit at the shambles.



## AS A WORKING OX,

He excels according to weight and size, any other known. Even in size, the ox is full medium, his solidity of carcass and muscular strength amply compensating for his apparent deficiency in bulk. For activity, intelligence and docility, he has no equal, and long experience has proved that where working oxen are in demand, an infusion of Devon blood adds largely to their value, both in price and performance of labor. They match readily, both in color and shape, the deeply concentrated blood of the bull imparting his color uniformly to his progeny. Their movements are quick and agile. They walk almost with the rapidity of the horse, possessing both wind and bottom. In short, the Devon is the *beau ideal* of a working ox, and as such, will always hold a pre-eminence.

## \*AS A DAIRY COW,

She is full medium, when milk is made an object with her. For breeding purposes solely, as with the short-horn, her milking capacity has been too often sacrificed for the benefit of her appearance. Naturally the Devon is a good milker. We have often seen Devon cows yielding twenty-four quarts of rich milk a day for weeks together on grass only, and making a corresponding weight of butter. They are kind and gentle in temper, and with the milking quality properly cultivated, they are, according to their weight and consumption of food, equal to any others. They have so proved in England—we know it to be so in America; and coupled with the manifold excellencies of her stock, no cow can be more profitably kept as an economical animal, either in the farm dairy or the village paddock.

## WHERE SHALL THE DEVON BE KEPT?

There has been much controversy among cattle breeders on this point. Our Western breeders and graziers, although they admire their beauty and symmetry, contend that the Devon is too small for their rich lands and huge corn cribs—the short-horn is better. We will not dispute that conclusion, well knowing the partiality of good stock feeders for large size, and corresponding consumption of food. But for the medium, and lighter soils of the country—and the richest also—in all its variety of climate, no beast is better calculated to win its way to success and favor. From Maine to Georgia, from the Atlantic shore to far beyond the Mississippi, the Devon thrives, and is a favorite with its keepers. On hills, or in valley, with scanty herbage, or a luxuriant growth, with anything like Christian treatment it will thrive, and do its duty.—*American Agriculturist*.

## IMPROVEMENT OF THE BREEDS OF CATTLE AND SHEEP IN ENGLAND.

We find the following in *Rural New Yorker*, extracted from the *London Quarterly Review* for April:

In the year 1856 a number of Englishmen crossed the channel with their best stock and implements, at the invitation of the French Government, and entered into competition with the picked agricultural and mechanical skill of Continental Europe. They found themselves the first in the arts and sciences required for producing meat and grain in the most economical man-

ner, under a climate not eminently favorable, and on land which has long lost its virgin fertility.—The live stock of the British islands are distinguished for three merits—the early period at which they arrive at maturity, the great amount of food they produce in return for what they consume, and the large proportion of prime meat they yield.

The cattle of “ancient days” were chiefly valued for dairy qualities or for draft, and were only fattened when they would milk or draw no longer. The greater number of breeds were large-boned and ill-shaped, greedy eaters, and slow at ripening—while as very little winter food was raised, except hay, the meat laid on in summer was lost or barely maintained in winter. Fresh meat for six months of the year was a luxury only enjoyed by the wealthiest. First-class farmers salted down an old cow in autumn, which, with their slices of bacon, supplied their families with meat until the spring. Esquire Bedel Gunning, in his *Memorials of Cambridge*, relates that when Dr. Makepeace Thackeray settled in Chester, about the beginning of the present century, he presented one of his tenants with a bull-calf of a superior breed. On his inquiry after it in the spring, the tenant replied:—“Sir, he was a noble animal—we killed him at Christmas, and have lived upon him ever since.”

The improvement of the breeds of live-stock is one of the events which distinguish the progress of English Agriculture during the last century.—Prominent among those who labored to this end, was Robert Bakewell, of Dishley, the founder of the Leicester sheep. He also had his favorite “long-horn cattle,” and “black cart-horses,” and though he failed in establishing these, he taught others how to succeed. Surrounded by the titled of Europe he talked upon his favorite subject, breeding, “with earnest yet playful enthusiasm;” there, “utterly indifferent to vulgar traditional prejudices,” he enumerated those axioms which must be the cardinal rules of the improvers of live stock. “He chose the animals of the form and temperament which showed signs of producing the most fat and muscle,” declaring that in an ox “all was useless that was not beef”—that he sought “by pairing the best specimens, to make the shoulders comparatively little, the hind-quarters large—to produce a body truly circular, with as short legs as possible, upon the plain principle that the value lies in the barrel and not in the legs, and to secure a small head, small neck, and small bones.” As few things escaped his acute eye, he remarked that quick fattening depended much upon amiability of disposition, and he brought his bulls by gentleness to be as docile as dogs. In sheep, his object was mutton, not wool, disregarding mere size.

Archbishop Whately, in his *Treatise on Logic*, illustrates a position by adducing Bakewell's theory, and he puts in a clear light the great cattle breeder's mode of proceeding, as follows:—“He observed in a great number of individual beasts a tendency to fatten readily; and in a great number of others the absence of this constitution: in every individual of the former he observed a certain peculiar make, though they differed widely in size, color, etc. Those of the latter description differed no less in various points, but agreed in being of a different make from the others—these facts were his data. \* \* \* \* His prin-

cipal merit consisted in making these observations, and in so combining them as to abstract from each of a multitude of cases, differing widely in many respects, the circumstances in which they all agreed."

But "fine-boned" animals were not in fashion when Bakewell commenced his career, and to the majority of people it seemed a step backwards to prefer well-made dwarfs to uncouth giants. At Ipswich it was proposed to present a piece of plate to Arthur Young for the public service he had rendered in introducing the South-Down sheep into Suffolk, when a counter-proposition was put forth. "that he was an enemy to the country for endeavoring to change the best breed in England for a race of rats." The graziers reasoned that "a beast could not get fat unless there was room to lay the fat on." This was the position maintained by the majority, but there were those not slow in seeing the truth. A South-Down ram belonging to ARTHUR YOUNG got by accident to a few Norfolk ewes of a neighboring farmer. When the butcher came in summer to select some lambs, he drew every one of the South-Down breed, which, he said, "were by much the fattest in the flock." The owner took the hint. After this period the principles of BAKEWELL were more favorably received, and some of the pupils succeed in improving upon the stock of the master.

The brothers COLLINGS, in Durham, established the "Short-Horns," and these soon superseded all other kinds where both flesh and milk were required. Mr. ROBERT MORGAN, the great cattle salesman, who sells about four hundred cattle each week, states that, while other favorite breeds are on the decline, this, with its crosses has increased upwards of ten per cent. QUARTLY took the curly-coated North-Devon under his special care.—PRICE took up the Hereford, and ELLMAN the South-Down sheep. The emulation gave rise to the forerunner of the modern fat cattle show, in single oxen of monstrous size, dragged round the country in vans. These shows shook the prejudice of modern graziers, and those who did not know anything of ARTHUR YOUNG, or his agricultural works—and would not have believed if they had seen them—were staggered by personal interviews with the gigantic Short-Horns.

In 1798 the "Little Smithfield Club" was established, "for exhibiting fat stock at Christmas time, in competition for prizes, with a specification of the food on which each animal had been kept."—This Society has rendered essential service by making known the best kind of food, and by educating graziers and butchers in a knowledge of the best form of animal. In 1806, in defiance of Mr. COKE's toast, "Small in size, and great in value," a prize was given to the tallest ox. In 1856, a little ox—Devon breed—of an egg-like shape—which is the modern beau-ideal—gained the Smithfield gold medal in competition with gigantic Short-Horns and Herefords of Elephantine proportions; and in 1855 a large animal of Sir HARRY VERNY's was passed over without even the compliment of a "commendation," because he carried on his carcass too much offal and more three-penny than nine-penny beef.

If you are disquieted at anything you should consider with yourself, is the thing of that worth, that for it I should so disturb myself, and lose my peace and tranquility.

## THE FLY—THE WEEVIL—THE RUST.

So long as wheat is the staple of our agricultural products, the three greatest curses to the farmer are the Fly, the Weevil, and the Rust. They destroy crops, annually, to the amount of millions of dollars, and so long as the birds are left to the tender mercies of every boy that can shoulder or shoot a gun, they will continue to increase in number, and extend their ravages. In Canada, between the years 1827 and 1844, they lessened the annual wheat crop over twenty million bushels. In 1827 the product, in Canada, was 22,981,244 bushels; in 1844 it was 942,835 bushels, and such were the ravages of these destructive, (fly and weevil,) that in New-Brunswick the raising of wheat has almost entirely ceased.

The fly came from the East, like the cholera, and like that fell destroyer has spread destruction as it went.

There are several flies that are destructive to wheat, which are generally confounded together. They are all called Hessian fly, or, more commonly, "the fly"—and probably a majority of our farmers think them the same. They are, however, entirely distinct in shape, form, color, and habits. One variety, called scientifically, "*cecidomya tritici*," and commonly, midge or wheat fly, deposits its eggs in the seeds, after they are formed. Another variety, the *cecidomya destructor*, commonly called Hessian fly, deposits its eggs on the upper surface of the leaves near the ground, when the wheat is but a few inches high, and generally in September. The eggs resemble minute, reddish grains, and hatch in about a week, when the worm crawls down the sheath of the leaf to where it joins the stalk just behind the surface of the ground, where it remains, subsisting on the juices of the plant, causing it to be weak and sickly, if not killing it. Here it remains, undergoing several changes; until the next May, when these worms hatch into flies, lay their eggs for another generation, and die. These eggs go through another process of transmigration, and produce a brood that attack the wheat again in autumn.

The Hessian fly does the injury in the fall, soon after the wheat comes up, or in the spring, just as it is again sprouting up. The midge, or wheat fly, does his injury after the seeds are formed. The Hessian fly injures the stalk, by wounding or boring the stem, rendering it weak, and by piercing the capillary tubes, a bad conductor of the juice. The midge, or wheat fly, does his injury by depositing its egg, when the plant is in flower, which hatches a worm that consumes the flour of the seed, and renders what is not consumed, black and unfit for use.

The Weevil, and these two flies, are often confounded, and all are indiscriminately called "the fly," and "the weevil." The Weevil (*Calandra granaria*) is also one of the greatest pests to the wheat-grower. They, more generally, breed in heaps of grain, and are sometimes so numerous as to destroy the whole of the flour, leaving only the bran.

As soon as the weather is warm enough in the spring, the sexes pair, and the female makes a little hole in the grain of wheat with her beak, and deposits an egg in it, from which is hatched a little maggot, which, during its growth, consumes the whole of the wheat kernel, except the coat or bran, and finally becomes a perfect bug, and, like the pea bug, eats its way out. From

the time of pairing to the time when the eggs hatch, is forty to forty-five days. A single pair have produced six thousand and forty-five weevils in a single season. As the female lays but one egg in a kernel, it follows that a single pair of these destructive insects will destroy 6,045 kernels in a single season;—each pair of their offspring, in their turn, become the parents of a like progeny. The female, after depositing the egg, closes the hole with a kind of gluten of the same color as the grain. This secures the egg from the changes in the atmosphere, and from disturbance in moving the grain.

The weevil is never found on the surface of the heap, but several inches below. It is there they live, couple, and raise new broods. As long as the weather remains warm the weevil does not quit the grain heap, but when the weather begins to grow cold they abandon the grain, and seek a warmer abode in the crevices of the wall or other cracks in the wood.

After pairing the males die very soon; the females as soon as they have deposited their eggs, and the embryo weevils pass the winter in the egg or larvæ state, ready to emerge from their dark and torpid state on the approach of warm weather, to renew their ravages.—Ohio Farm.

#### SADDLE HORSES.

WHAT THEY ARE, AND WHAT THEY OUGHT TO BE.

The Americans have much to learn in the matter of saddle-horses; even the Southerners who ride a great deal, much more than we of the North, who ride comparatively little. An easily and stylishly going hack, well bitten and broken, is a phenomenon of rare occurrence among us.

This doubtless is, in some measure, owing to the greater demand for harness horses, which carries off nearly all the best animals in that direction. But the actual saddle-horse material in market is shamefully mismanaged. Very few dealers, stable-keepers or horse fanciers of any sort, have the first conception of what a saddle-horse is. (Our having no term that corresponds to the English *hack*, is an incidental proof of this.) Their only idea of one is that he can carry a man without falling down or running away. They do not even know what his gait should be. Thus I read some time since, in your western correspondence, that "a horse which could not *rack* was only half a saddle horse;" and this opinion, I am sorry to say, is not confined to the West. Now, if there is anything more than another utterly ruinous to the formation of a class of hacks, (I shall continue to use the English term without fear of being misunderstood,) it is the idea that a hack should travel camel fashion, with both legs on the same side of the ground at once.

In the first place, this gait (call it ambling, racking, pacing, or what you will, is the most ugly and ungraceful ever devised for a quadruped. Some rackers look less ugly in motion than others, particularly some of the very fast pacers, which is partly because they are going at such a locomotive velocity that you have not a chance to criticise their action. But *style* and *beauty* are terms inapplicable to the action of any racker. This I say not only of American horses, but of *all* horses that pace. When the Persians appeared last year in Paris, the general remark among connoisseurs was, "What fine horses, if they were only broken to a proper gait!"

But the rack is defended on the ground of its *easiness* (to the rider, of course; that it is a fatiguing gait to the horse, is generally admitted.) Even here I believe its claims much overrated.—If the racking motion does not lift the rider from the saddle, it often swings him (or her) sideways in a not very pleasant manner. It is as great a mistake to suppose all rackers easy, as all trotters hard. But let us admit that the rack is, on the whole, an easier gait than the trot; it is not by any means so easy as the canter, which our people would soon find out, if one in a hundred of them ever rode or saw a properly cantering horse.

What is usually called a canter, in America, is a hand-gallop, as fast or faster than a good round trot, and one of the hardest gaits a horse has, particularly if not accustomed to it. Thus I have seen a gentleman riding a 3.15 trot, and a lady cantering alongside him. Now the real canter is something very different from this; and as it is the *essential* pace of a hack (though not by any means his *only* pace, as we shall have occasion to remark further on,) it may be well to explain it in detail. The canter proper is a *slow* gait, rather under than above eight miles an hour. A small or short-bodied horse usually has a short stride, which is generally the easiest, though not the handsomest canter. A large horse with some blood (and a large horse must have some blood to be a good hack,) usually has a long stride, and may appear to be going faster than the rate above mentioned, but in reality is not, for he *rests* or *dwells* in his canter, lifting his feet slowly.

The horse must canter on his *right* leg—that is to say, he must put out his off fore-leg, in his stride. The reason sometimes assigned for this, that he looks better thus, is not the real one.—There may be a sort of conventional beauty in it. In London or Paris it does not look well—that is to say it looks *odd*—to a connoisseur to see a horse cantering on the left leg, because all hacks are trained to canter on the right, but some horses are actually more showy—higher in their action, and more inclined to prance and curvet on the left leg than on the right. The real reason is a better one, that the canter of most horses is much easier when they put the right leg foremost. I say of *most* horses, for there are exceptions to this rule, as to all others. Now and then you will meet a horse who canters *naturally* on his left leg; it is very difficult to start him on the right leg, and when you succeed in doing so, his pace is not so easy. But these are rare exceptions. Most horses are sensibly easier on their right leg; there is no necessity for looking down to see which leg is first, you might tell it blindfold.

He must start on his canter *easily*, without pulling or rushing. Whether he is walking or trotting, a gentle lift of the hand should set him off in a hand-gallop for the first fifty yards before he settles, nor require a hard pull afterwards to keep him from *unsettling* himself again, by quickening his pace to the same gallop. Still less must he slide into a trot, when not wanted to leave off cantering.

But though the canter is the most essential pace of the hack, it is not by any means his *only* one. When you do find an American saddle-horse that can really canter, he is pretty sure to have learned it at the expense of all idea of trotting. But the hack must know how to trot at a moderate pace, both on his own account and his rider's. On his

own account, because the canter is an artificial gait, and however easy to the horseman, fatiguing to the horse, if constantly persisted in. On his rider's, for many reasons. The canter is peculiarly a gait for summer; in cold or raw weather it is really too easy, and not exercise enough. The trot is a more appropriate gait in many situations, especially in passing through a town or village.—The canter is a slow pace, and should the equestrian be pressed for time, if his horse will not trot he must run him, which is not pleasant on a high road, nor particularly beneficial to the horse's legs and feet. For these and many other reasons, the hack should be able to trot a good round trot of ten or eleven miles an hour. He must also have some notion of running, fast enough, at any rate, to get out of the way of any crowd of trotters or pacers—the only case in which it is right and proper to run a horse on the road. He should be capable of being brought down from his run in somewhat less time than it takes to pull up a locomotive. Of course, he cannot be expected to run as he canters, always on the right leg. He will sometimes even change legs while running.

Finally, he must be a good walker—not merely a safe one, but with a certain speed, say 3½ miles an hour; otherwise he will always be "padding," or going "butter and eggs" in company with other horses. The end of walking is to repose both horse and rider, and this kind of jig-jog does neither. There is a kind of dancing or dwelling trot, slower than a good walk, which some spirited and highly-trained horses have. It is a very nice accomplishment for a fashionable hack, but he ought always to be able also to walk when required.

A man riding much alone, and in all sorts of weathers, except the very worst, wants a pretty lively horse under him, one that is rather frisky than otherwise, and never requires urging. But riding in company, especially in ladies' company, he wants a quiet horse. Now the difficulty is that horses are very apt to excite one another when together; the same animal who, alone, will canter five miles without once bearing on the rein, or changing legs, will begin to haul and jump when he finds himself in a party. I have strong doubts if the two things are compatible. At any rate, it is well to bear this in mind. If a man rides enough to require two saddle-horses, (and few who ride regularly can do with only one,) it is easy to choose them of different temperaments; otherwise he must make his selection according as he is likely to ride oftener alone or in company.

It would be foreign to our present purpose, and would occupy too much time to treat of the hack's points. We have only undertaken to speak of his gait. Nevertheless, a few hints may not altogether be out of place. The first essential for safety is that he have a good oblique shoulder. I say the first, for a horse with weak legs, or unsound feet, may break down, but a horse with a straight shoulder must, and will probably come on his knees just when you least expect it. Next to the shoulder come the fore legs and feet, which should be unexceptionable. A thrush, for instance, is only a small blemish in a harness horse, but a dangerous defect in a hack. Of the sort of neck that a hack should have, I treated at length last winter in an essay on Martingales. A horse that is short in the body will not be likely to run fast or pleasantly. Never buy a horse for the saddle

if you can find traces of "interfering" anywhere on him, behind or before. Bad shoeing may have caused the habit, it is true, and good shoeing may be able to cure it, but the experiment is a risky one; and recollect you cannot put a boot on him, as you may on a carriage horse.

It is a pity our people do not ride more. The climate is sometimes made an excuse, but nobody who owns a "flyer" ever thinks it too cold to drive, and driving is much colder work than riding. If the summer mid-day is too warm, the mornings and evenings are delicious. There is nothing like riding for the liver, the part of the human frame most usually out of order in America. The 2:40 flyer is a great institution, and very well in his way, but for health and real enjoyment nothing equals the saddle.—CARL BENSON, in N. Y. Spirit of the Times.

### BUTTER PASTURES.

There is a neglect in many of us in regard to pastures of any kind, and a serious neglect in regard to the pasturing for milch cows. With too many of us, if the herbage in a pasture comes up green in the spring, and continues so through the summer, it is a pasture. No matter what the kind of grass or herbage it is that gives the green color to the face of it, we turn in our cattle and let them "take chance" as the Irishmen say.—Now the cow if she could speak would tell you in strong language, that every green field is not a pasture for her. Indeed she does tell you every day in the quantity and quality of her milk, and in the quality of her butter and cheese, what the character of the pasture is.

The cow is an *animus chemicus* manufacturer.—Her duty is to manufacture the food that you supply her with into milk, butter, cheese, &c. According to the quality of the raw material given, will be the quality of the product. Often-times the poor cow is blamed and considered good for nothing, when her owner is to blame for supplying her with good for nothing material from which to make the product required.

A little observation will convince any one of this fact. In some rough pastures it is difficult to make much improvement or change, but yet much can be done by the use of plaster, bone dust, &c., and by scattering occasionally the seed of the best kinds of grasses.

Mr. Dickinson in an address delivered before the Tioga Agricultural Society in Pennsylvania, said, the "first quality of butter land is confined to portions of New England, New Jersey, and Pennsylvania, and New York, while cheese and sheep can be grown wherever grass grows.

For this you must have in your pastures, Timothy (Herdgrass), white clover, blue grass, (what we call June grass. Ed.) red top, pure soft water, and a rolling or hilly country. There will be then (when swarded over,) a solidity and sweetness to the grass, that will give to the butter that rich sweet flavor that makes it so desirable. Butter takes not only of everything the cow eats and drinks, but of every offensive thing within its reach after it is made.

He also advances the theory that butter made from red clover fed to cows, is good when first made, but when laid down in packages six months it seems to lose its flavor, and becomes more or less rancid according as the clover she eat was rank and of rapid growth or not.—Maine Farmer.



## NEW ROUTE FOR GRAIN.

We have been struck with some surprise by the following advertisement in the Easton Gazette of July 24th, and copy it into our pages for the purpose of drawing the attention of our Baltimore Merchants to this new enterprise. Mr. Hughlett, is a most successful and practical farmer and man of business, and would hardly have entered upon the undertaking of shipping grain to New York instead of to Baltimore, and have offered the services of his vessel to his neighbors for that purpose, unless with a well grounded expectation that it would be to his and their profit and advantage. What is the matter with our Baltimore Market? Surely Maryland grain ought to find its best and highest price here!

## DIRECT FOR NEW YORK.

The new, substantial and fast sailing schooner, THOS. R. HUGHLETT—JAMES A. RIDGAWAY, Master, will be run from Talbot county direct to New York, for the purpose of carrying grain on freight. She is now ready for the reception of freight, having sufficient divisions in her hold, can carry each shipper's grain of different quality and condition. The advantages of a different shipment to New York, instead of being carried to Baltimore, and re-shipped thence to New York, offers strong inducements to the Farmers of Talbot county. Freight ten cents per bushel.

ORDERS.—All orders directed to Thos. Hughlett at the Trappe, will receive prompt attention.

THOS. R. HUGHLETT.

Wm. T. PORTER, a sporting writer of the old school, and one of the most brilliant writers of his day, died in New York on the 19th inst. in the 53d year of his age. For more than a quarter of a century the deceased was connected with the "Spirit of the Times," which journal he started, but for two years past he has published a paper called "Porter's Spirit of the Times."

## NEW ADVERTISEMENTS.

We call attention to the following new advertisements:

R. A. Worrell, Esq., offers a very valuable Farm for sale near Norfolk, Va.

D. T. Hartsook, Esq., Agent, offers a valuable property in land and negroes, in Lancaster County, Va.

James Smith, Esq., offers farm for sale, near Galesville.

W. J. Fife, Esq., offers a cheap property in Spotsylvania County, Va.

J. B. Jett, offers a farm in Westmoreland, Va.

C. K. Mallory, Esq., Ex. offers fine property for sale.

A. F. Cox, Esq., offers a farm in Westmoreland County, Va.

A farm of 70 acres is offered in Norfolk Co., Va.

N. C. Brooks, Esq., advertises the Baltimore Female College.

Mr. F. H. Grupy, advertises his large stock of Leather, &c.

J. J. & F. Turner, Baltimore, offer "Do Burg," Patagonian and Mexican Guanos, for sale.

Dr. Baake's advertisement will attract the notice of the reader. He professes to pay especial attention to diseases of the eye and ear. His advertisement will speak for him.

Mr. Adams advertises the "Adams House," a new Hotel on Hanover street.

Dr. Wm. Sands, advertises a School in Hanover street, which we are sure will deserve patronage.

E. V. Dickey, of Chester county, advertises seed wheat.

F. H. Stickney, advertises his business card.

Isaac Pullen, advertises his Nurseries at Hightstown, N. J.

John Kettlewell advertises his Manipulated Guano extensively.

The advertisement of the Philadelphia Guano Co., of their Colombian and other Guanos, which was accidentally omitted last month is renewed.

Asher Hance & Son, advertise Peach Trees.

John R. Reese & Co., have renewed their advertisement of Manipulated Guano.

James Bond & Bro., sell largely on Commission for Farmers and Gardeners.

Wm. H. Dungan, offers his services as general Commission Merchant, &c.

Martin Goldsborough, offers South Down Sheep.

Thomas Blagden, offers a choice Bull and Pigs.

Wm. Prince, offers to send his catalogue of choice Strawberries.

E. Whitman & Co., besides their usual assortment, offer Cahoon's Patent Broad Cast Sower—a Smut Machine and portable Forges.

Thompson & Oudesleys, advertise Water Pipes.

Wm. Grange, advertises anew his Bone Dust.

Sinclair & Co., offer additions to their usual large assortments.

A. R. Elliott offers a valuable Farm and Fishery. Mrs. Lucy A. Bramham offers a large farm in Warsaw Co., Va.

Malcom & Co., Baltimore, offer Guano, &c.

Ault & Son, Baltimore, offer their Garden Seeds.

Whitelock & Co., Baltimore, offer Peruvian and African Guano, &c.

Richard Cromwell, Balt., offers for sale Horse Powers & Threshers, Grain Fans, Seeds, &c.

Wm. Robinson, Balt., offers Peruvian; Mexican and other Guanos, for sale.

Joshua Horner, Balt., offers Bone Dust and Animal Manures.

J. Montgomery & Bro., Balt., offer their Grain Fan and Bickford & Huffman's Drill.

GRASS AROUND FRUIT TREES.—No one who has the least knowledge of the cultivation of fruit, will allow grass to grow around his young trees. It is a great drawback upon their growth and health. For several years, at least—and we would recommend it at all times—the soil should be kept pulverized around the trunks of fruit trees. Only give your trees as much attention as you give your cornfield, or your cabbage bed, and there will be no secret in the raising of superior crops of good fruit.

## A POSITIVE CURE FOR CANCER, WITHOUT THE USE OF CAUSTIC OR KNIFE.

Endorsed and Legalized by Especial Enactment of the State Legislature of Maryland.

With a good report from five physicians of the House of Delegates who were appointed to examine its claims.

The undersigned will guarantee a cure of all external Cancers, where vital parts have not become involved before the application is made, and the general health of the patient is good.

The above is all that is deemed necessary to say, as the great efficacy of this remedy is now pretty extensively known.

A pamphlet giving useful information on the subject, will be sent to all requiring the knowledge it contains, who will inclose stamp. Address,

JOHN CATHERS,

Office, 103 Baltimore street, Baltimore, Md.  
jyl-lyr.



## AULT'S ENGLISH CABBAGE SEEDS.

WE have received our fresh stock and usual varieties which are of the same superior quality and kinds as formerly. We name in part: Ault's Early York, Ault's Early Large York, Ault's Bullocks Heart, Battersea, Early George, Ault's Premium Large Flat Dutch, Large Drumhead Savoy, and all other varieties.

Also, Cauliflower, Red Top and White Flat Norfolk Turnips, Ault's Improved Ruta Baga, Yellow Hybrid, White Globe, Flat Dutch and all other Garden Seeds of our usual superior kind. Wholesale and retail.

SAMUEL AULT & SON,

augl-2t Cor. of Calvert and Water-sts., Baltimore.

## PIPES FOR WATER, GAS AND STEAM, CE- MENT, &c.

ALL sizes Wrought and Cast Iron Tubing; also Galvanic Tubing from 4 inch upwards; to screw together. The Galvanized Article is rust proof, and is not affected by certain properties in water like the lead pipe, besides, being stronger and cheaper; GLAZED inside and outside STONE WARE PIPES for Water, in 2 feet lengths; also ROSENDALE and ROMAN (English) HYDRAULIC CEMENT, SCOTCH CLAY CHIMNEY TOPS for Cottages; GARDEN VASES of TERRA COTTA WARE, &c., &c.; Agents for WILDER'S SALAMANDER IRON CHESTS for Plate, Books and other valuables—NOVA SCOTIA PURPLE PAINT, for Barns, Iron work, &c., also ARTIFICIAL SLATE PAINT, (fire proof) leaving a coating of actual Slate on wood—SHOVELS and SPADES, &c. A large stock of the above together with Pig Iron, TIN, SOLDER and other metals, SHEET IRON, &c., for Sale by

THOMPSON & OULDESLEYS,

No. 57 SOUTH GAY ST., near the Custom House, Balto.  
augl-2t

## RED CHAFF MEDITERRANEAN WHEAT.

I CAN supply seed of this valuable variety of wheat, which has proven itself much superior to the common variety in productiveness, in withstanding the ravages of the fly, and from its early maturity; it is not injured by the red weevil. A sample may be seen at the office of the American Farmer, or at the office of W. S. Cross, N. E. Corner of President street and Centre Avenue.

Address, G. V. DICKEY,

augl- Oxford, Chester Co., Pa.

## CHANGE OF TIME

For the opening of the

Maryland State Agricultural Society's Show,  
in Baltimore, from 26th

TO 19TH OCTOBER.

IN consequence of the opening of the Fair of the United States Agricultural Society, upon 26th October next, at Richmond, Virginia, the Executive Committee of the Maryland State Agricultural Society, have determined to open their Exhibition upon the grounds of the Society on NORTH CHARLES STREET, in the city of Baltimore, upon 19TH OCTOBER, and continue it during the 20th, 21st and 22d. JOHN MERRYMAN, President.

SAMUEL SANDS, Gen. Sec'y.

## VALUABLE FARM AND FISHERY IN EASTERN VIRGINIA—FOR SALE.

I OFFER for sale the FARM upon which I reside, in Norfolk County, situated on Sewell's Point, nine miles from the City of Norfolk by land, and about twelve miles (via Hampton Roads), by water. The tract contains 310 acres, about one half of which is cleared, the balance well set in timber of original growth. The soil produces fine crops of Corn, Oats, Potatoes, Clover, &c., and is eminently adapted, both by quality and its protected position to the early maturity of Vegetables, to the culture of which a large portion of the land is now devoted. There are upon the Farm several springs and wells of excellent water, and a large number and variety of the choicest Fruit Trees.



The Improvements consist of Two excellent Dwelling Houses, and every other building necessary upon a Farm of its size, all conveniently arranged and in good state of preservation and repair. One of the dwellings is nearly new, is built in modern style and of the best materials, and contains six rooms 15 by 12, with fire places, besides smaller rooms, attic, &c.

From the residence a fine open view is commanded of Chesapeake Bay, Hampton and Old Point, the latter being distant but about 4 miles.

The Farm is bounded on the North by Willoughby's Little Bay, (so justly famed for its fine Oysters,) on the East by a branch of Mason's Creek, and on the West by a narrow strip of wood-land separates it from Hampton Roads. It will thus be seen that the tract is nearly surrounded by water, protecting it greatly from the effects of frost. Upon the Bay shore is one of the most valuable spot and Trout Fisheries in the State, and both on Bay and Creek, opportunities to almost any extent are afforded for planting Oysters.

Country property combining in such a degree the many advantages of healthful and desirable location, good improvements and resources of profit, it will at once be perceived, is seldom placed in Market, and persons desirous of securing a situation in this favoured section of Virginia will do well to apply early, as at the price I offer the Farm I have no idea it can remain long unsold.

In the description above given I have sought not to puff or exaggerate, but simply to call attention to the place, and feeling satisfied that any idea which may be formed from this advertisement will be more than realized by an examination of the premises, I prefer that persons disposed to purchase should visit it and examine for themselves.

I will take for the Property \$15,000.

augl

A. R. ELLIOTT.

## FARM FOR SALE.

I AM anxious to sell immediately, if I can, my Farm HAZEL HILL, in Spotsylvania County, Virginia. Owing another place, I cannot attend to both. The farm is about 14 miles Southwest of Fredericksburg, and six west of county seat. It contains 800 Acres, divided into 5 fields, 550 being arable, the balance well timbered. It has 150 Acres of good bottom land—well adapted to grain and grass—while the high land has no superior in the county, in its adaptation to grain, tobacco and grass, and its high susceptibility of improvement. The house on the place for every variety of farming, are ample, and in pretty good repair. The dwelling house large, in good order, and every necessary out house. I invite an examination of the farm, and am willing to sell it, just as the lands and the growing crops show for themselves, and am satisfied that no such farm, combining advantages of soil, location, and cheapness of price, can be purchased in Virginia or Maryland.

If any one will purchase this farm, I will do the following and seeding for him, if a matter of convenience, and can give possession in Fall—and will then sell all stock, provisions, farming utensils, &c., at his own figures.

augl

Daniellsville P. O., Spotsylvania Co., Va.

## FIOR SALE.

A BEAUTIFUL FARM in Northampton County, of 70 Acres or more, on the Elizabeth River, 2 miles from the wharf of the New York steamer. Soil fertile, abounding in fruit trees of every variety, and warranted healthy. It has a comfortable and commodious Dwelling House, large Kitchen, Barn, and other out-houses.

Price \$7,000. Possession given first January next, if bought soon. Apply at the

augl-it

ARGUS OFFICE, Northampton.

## Most Valuable Farm For Sale, 10 MILES FROM NORFOLK CITY.

I AM authorized to sell one of the most valuable farms in Eastern Virginia, containing 1800 to 2000 acres, completely situated in one body or tract, on Mill Creek which empties into the Southern Branch of the Elizabeth River, about four miles above the Navy Yard, Gosport; the river being navigable to the mouth of the creek for the largest class of sea-going schooners, and the creek itself navigable to the barn door of the Farm for lighters carrying 1000 bushels of grain, or twenty-five cords of wood. The new Chesapeake and Albemarle Canal passes within 1-2 miles of the farm and empties into the river at the mouth of the creek. There is about 400 acres of the land cleared and in a high state of cultivation, yielding 8 to 10 barrels of Corn to the acre. The present year a portion of the land was cultivated in wheat, and no land in this section yielded more abundantly.

About 1500 acres is heavily timbered in original growth of Oak, Holly, Beach and Pine, from which at the lowest calculation from 60,000 to 75,000 cords of wood could be cut, which would sell at the landing for \$3½ per cord, or in the Norfolk Market at 3¼ to 3½, and would pay the purchase money back three times over, nett.

In addition it is one of the best stock farms in this whole section.

The improvements consist of an excellent dwelling in good state of repair, all necessary out-buildings for servants' quarters—capacious barns, stables, &c., &c.

The neighborhood is one of the best in the State—society being refined and cultivated. It is distant only 2 miles from the village of Deep Creek, where there are churches, good schools, &c.

To any person desirous of making a profitable investment, such another opportunity may not present itself for years, to select so good a farm, so eligibly located, and withal healthy.

It is presumed that any person desiring to purchase will examine the premises, but I will say that I have not over-estimated its advantages or value. The owner is induced to offer it for sale because he has not sufficient force to make so large a tract productive.

The terms at which it is offered are \$15 per acre, one fourth of the purchase money payable in cash, the balance in equal annual installments bearing interest from date and secured by mortgage on the premises, at which price it is far below the market value of any lands in this section of Virginia. Possession will be given the first of January next, or sooner if desired. For further particulars, address,  
R. A. WORRELL,  
Norfolk, Va.  
aug-31.

## FARM NEAR WEST RIVER FOR SALE.

THE subscriber offers for sale the Farm on which he now resides, lying on the Chesapeake Bay, near West River, and about two miles South of Galesville, containing 233 acres of Land, about 50 of which are covered with heavy White and Red Oak Timber; the residue is in a good state of cultivation; a portion is in meadow and suitable for grazing purposes. The soil is similar to that of Talbot county. The improvements consist of a new two story Brick Dwelling, twenty-eight by thirty-six feet, with a frame Kitchen adjoining. Also three Frame Dwellings, Corn House, Stable, &c. There is an Orchard of young Peach Trees in bearing this season; a Pump of Good Water near the dwelling; an abundance of Fish and Oysters in season. Location healthy.—For further particulars apply to or address  
JAS. SMITH, Galesville, Md.  
aug-31.

## RICHMOND HILL FOR SALE.

THIS well known and valuable Farm is now offered for sale on the most accommodating terms. It contains between 11 and 1300 Acres, and is well situated to be divided into two or three smaller tracts. It is rarely such a farm in the market, possessing superior advantages of soil, timber, locality and accommodations for a large family. It is situated immediately on navigation, and three miles only from Warsaw, the County Town and Court House. Persons are invited to examine the place, and judge for themselves. The overseer on the place will take pleasure in shewing it to any one disposed to purchase, and proposals can be made to Mr. Leland, at Johns Key Bridge, adjoining, or to the subscriber in Tappahannock, Essex county, Virginia, L. A. Bramham—or to Lyne Shackelford, Esq., Warsaw, Va.  
aug-1

LUCY A. BRAMHAM.

## IMPORTANT SALE OF A SALT WATER ESTATE, 40 OR 50 NEGROES, CROPS, &c. privately or at public Auction.

I OFFER for sale that very valuable estate "Indian Tower" lying on the Rappahannock and Corrotoman Rivers, in Lancaster County, Virginia, containing 1600 acres, chiefly low grounds, highly improved, and very productive in corn, wheat and tobacco. The last has not been cultivated on the estate for some years; but it could be to great profit. There are banks of shells, and I believe of marl on the estate, with which its fertility may be increased to any extent. It lies immediately on navigation for vessels of the largest class, about half of it cleared and well enclosed, the residue in wood and ship timber, which commands a ready sale and would yield a large portion of the purchase money. The oysters and fish, (for which this locality is proverbial,) with a little attention, would produce a large income, as it possesses a creek, with the finest coves for this purpose, from which the public is excluded.

I desire to sell the estate with or without the negroes, stock, crops, &c., privately. It is cheap at \$30 per acre, ought and soon will command more, but I will take less, and if not sold privately before, (of which notice will be given,) I will sell to the highest bidder on the premises on Thursday, the 2nd day of September next.

This sale has become necessary to wind up the co-partnership of G. & A. Rust, the former deceased and the latter residing in another State. To any one wishing a most desirable estate at less than its value for settlement or speculation, an opportunity rarely occurring is now presented. Terms very liberal, apply to

D. T. HARTSOOK, Agent,  
Howardsville, Virginia.

aug-1

## A VALUABLE VIRGINIA FARM FOR SALE.

I OFFER for sale my Farm, "LOCK HARBOR," situated in Westmoreland Co., containing 363 Acres, about one-fifth in woods, and the balance under cultivation. It lies immediately on Nomoni Bay, within a mile and a half of the Potomac River, and is abundantly watered by never-failing streams. The land is level, highly productive, and lies remarkably well for cultivation.—It is not often that a farm of this size is offered for sale, presenting so many attractions to the purchaser. The facilities for shipping grain are rarely equalled; the barn in which the grain is stored, is situated almost immediately on the water, and vessels lie within one hundred yards of the shore. The location is very handsome, and with some slight improvements, it might be made one of the most beautiful and desirable residences in the Northern Neck. The neighborhood offers every social inducement. Churches of the different Christian denominations are very near, and post offices, stores, mills, blacksmiths' shops, &c., are all at convenient distances.

The improvements consist of a comfortable two-story FRAME DWELLING, with the usual out-buildings, some of which are new. A large and productive Garden, and a good Orchard, may be mentioned among the improvements. The luxuries of the salt water, fish, oysters and wild fowl, are to be had in abundance. The subscriber will take pleasure in showing the premises to any one visiting the farm with the view of purchasing. All communications addressed to Rice's Store, Westmoreland Co., Va.  
aug-1f J. B. JETT.

## A SMALL FARM FOR SALE.

I WILL sell privately my Farm, in WESTMORELAND Co., Va. It abounds in springs of the purest water; is convenient to mills, navigation, and landings and wharves for steamers to Baltimore, Alexandria, &c. The neighborhood is very good, remarkably healthy; churches convenient; plenty of wood, and some timber. For further particulars address  
A. F. COX,  
Hague P. O., Va.  
aug-1f

## TO FARMERS AND GARDENERS.

THE subscribers would respectfully solicit of farmers and others, consignments of POTATOES, ONIONS, BEANS, PEAS, APPLES, PEACHES, DRIED APPLES AND PEACHES, &c.—for which the highest market price will be paid, or sold on commission.

JAMES BOND & BRO.,  
No. 1½ Hollingsworth street, near Pratt,  
Baltimore.

aug-1-lyr

**BALTIMORE MARKET—July 28.**

**Flour**—Flour has advanced during the month about fifty cents a barrel. The demand is active and the tendency upward. Howard street superfine we quote at \$4.50; extra \$5, for Ohio; \$5.25 for Howard st.; and \$5.50 to \$6 for new city mills. Baltimore ground family flour \$7.50; extra \$6.50.

**Wheat**—Wheat is coming forward freely and there is a good demand on the part both of shippers and millers. There has been an advance during the month of about twenty cents per bushel, and the tendency is to further improvement. We quote red at 1.12 to 1.20 per bushel; white 1.13 to 1.15 for ordinary, 1.20 to 1.25 for fair; and 1.30 to 1.40 for prime. Corn 82 to 84 for white, 88 to 90 for yellow. Rye, 63 to 65 for new Maryland, and 76 to 77 for old Pennsylvania. Oats, 30 to 33; some old lots 38 to 41.

**Cotton**.—11½c. cash; 14½c. at 4 to 6 months.

**Plaster**.—\$2.50 to \$3 per ton.

**Tobacco**.—The demand for tobacco is active, and sales are made readily as soon as inspected. The prices are firm but have not advanced. Inferior to good Maryland crop, \$4 to 7; superior, \$8 to 11.—There is good demand for Bay tobacco. We quote tips, \$4.50 to \$5.50; seconds, \$5.50 to \$7; spangled, \$7 to \$12; fine yellow, \$18 to \$20. Ohio, common green, \$5.50; common spangled, \$6.50; common to middling red spangled, \$6.50 to \$7.50; good to fine red yellow spangled, \$8 to 10; good to fine yellow, \$11 to 15. Kentucky, \$6 to 6.50 for lugs; \$7.50 to 8.50 for medium leaf, and \$9 to 12 for wrappers.

**Wool**.—Sales this month about 35,000 lbs. We quote now, unwashed 18 to 20 cts., 28 to 30 for tub washed, 23 to 27 for No. 1 pulled; 26 to 29c merino pulled: common fleece washed, 25 to 27c; ½ to ¾ blood 28 to 33c; ¾ to 1 do. 33 to 35c; ¾ to 1 do. full, 34 to 38c; for extra 38 to 42c; (all washed.) These are cash prices paid here by Baynes & Son, whose advertisement will be found in the Farmer, without charge for commissions, &c. Wool has been in good demand for the last week or so, and tending upwards.

**Cattle, Sheep and Hogs**.—There is a fair supply of Beef Cattle. We quote \$3 to 4, averaging \$3.75 on the hoof, equal to \$6 to \$7.75 net. Hogs have advanced; we quote \$6 to 7 per 100 lbs. net. Sheep \$2 to 3 per head.

**Peruvian Guano**.—We quote best Peruvian at \$57 per ton of 2000 lbs. at the agent's warehouses, and \$62 per ton of \$2,200 lbs. We note the import of 593 tons during the past week. Good supply.

**CONTENTS OF THE AUGUST NO.**

The surface application of Stable & Barn Yard Manures, as a practical question,	33	ral productions of Al- bemahe County,	4
The Theory of Surface Manuring,	34	Education of farmers,	4
Farm Work, for August,	35	Editorial Notes & Notices,	48
Garden Work,	37	Indiscreet Teachings,	49
Floriculture,	37	Horse Taming and Horse Tamers,	50
Farmers' Certificates in fav'r of Sup. ph'sphates	38	Pear Culture,	51
Eradication of Briars,	38	The Gr'n Inspect'n Law,	52
Garlic for Pasturage—De- struction of Garlic,	39	The Crops,	54
Snake Fascination,	39	American Cattle. The Devons,	56
Potato Disease, discovery of cause and remedy,	40	Improvem't of breeds of Cattle and Sheep, in England,	57
Sale of Tobacco at Rich- mond and Baltimore,	40	The Fly, the Weevil and Rust,	58
Various Breeds of Scotch Cattle; cross'g of br'ds,	41	Saddle Horses, what they are and what they ought to be,	59
The Insect Plagues of ag- riculture,	44	Butter Pastures,	60
Defects in the Agricultu-		New Route for Grain,	61
		New Advertisements,	61
		Baltimore Markets,	65

**WM. W. DUNGAN,****GENERAL COMMISSION MERCHANT,  
90 SOUTH CHARLES STREET,  
BALTIMORE.**

Invites the attention of Farmers to his stock of **ESME. RALDA—BROWN MEXICAN GUANO**—in barrels and ready for delivery—which he will sell on accommodating terms. **Orders by letter promptly attended to.**  
Apply as above. aug 1-3

**WM. W. DUNGAN,****COMMISSION MERCHANT,  
90 SOUTH CHARLES STREET,  
BALTIMORE.**

Solicits consignments of **Tobacco, Wheat, Corn and General Country Produce**, giving assurance of personal supervision of all articles committed to his care, and that no pains will be spared to give entire satisfaction.  
Special attention given to commission for the purchase of merchandise. aug 1-3

**HALL OF ST. STEPHEN.****An Institute for Boys.**

**THIS** Institute will be re-opened on the **SECOND MONDAY in August, (9th.)**

Principal—**WILLIAM SANDS, A. M., M. D.** Rooms, Lecture Room of St. Stephen's Church, in HANOVER, BETWEEN BARRE AND LEE STREETS. Circulars can be had by applying at No. 151 Sharp street.

The Juvenile Department, for children of both sexes, will be re-opened at the same time and place—**Miss E. SANDS, Teacher.** and

**INGERSOLL'S IMPROVED PORTABLE  
HAY PRESS.**

**WE** call attention to this Press, which combines greater power and durability, requires less labor, occupies less space, and costs less money than any other machine in Baling Hay or Cotton, ever offered to the public.

Also Fairbank's Hay, Cattle and other **SCALES**—**Evans & Watson's Fire and Burglar Proof SAFES.** For sale by **JAMES O. SPEAR & Co., Sole Agents,**  
aug 1-1yr 41 South Charles Street, Baltimore.

**H. F. STICKNEY,****IMPORTER & WHOLESALE DEALER IN**

**BRANDIES, WINES, GIN and Superior Old Rye and Bourbon WHISKIES,**  
**No. 27 CHEAPSIDE, BALTIMORE.**

Persons ordering by mail, may feel assured of getting **PURE** articles, at the **lowest** market price. **Rectified Whiskey**, of superior quality, always on hand. aug 1-ly

**SUPERIOR SOUTHDOWN SHEEP.**

**FOR SALE.** I have for sale ten yearling Southdown **RAMS**—and twenty **EWES**—by the Premium imported Buck (Webb's stock)—and out of full blood Ewes (Cope's stock and others.) There is no better stock of Southdowns in the United States. For particulars enquire of, or address **MARTIN GOLDSBOROUGH,**  
Agent, 42 Calvert street, Baltimore.

The following will indicate the character of the **Buck** above mentioned:

**Baltimore, October 25, 1856.**—The Southdown Buck, ten years old, marked 60, was purchased of Mr. Jonas Webb, Babraham, Cambridgeshire, England, on the 6th of August, 1856, by Thos. Betts & Co. The above Sheep have been five first prizes, in five different States, since he has been imported, and now sold to Col. France, for \$300.  
**THOS. BETTS & CO., 81 Maiden Lane, N. Y.**  
aug 1 and 14 Canning Place, Liverpool, England.

**PREMIUM STRAWBERRIES.****WM. R. PRINCE, Flushing, New York.**

Will transmit their **New Descriptive Catalogue of Strawberries** to applicants, who enclose stamps. It comprises every estimable variety, and the prices average lower than elsewhere. In no case will any variety be charged above the lowest rates named by others. Catalogues of every other Department of Nursery stock, gratis. aug 1-3